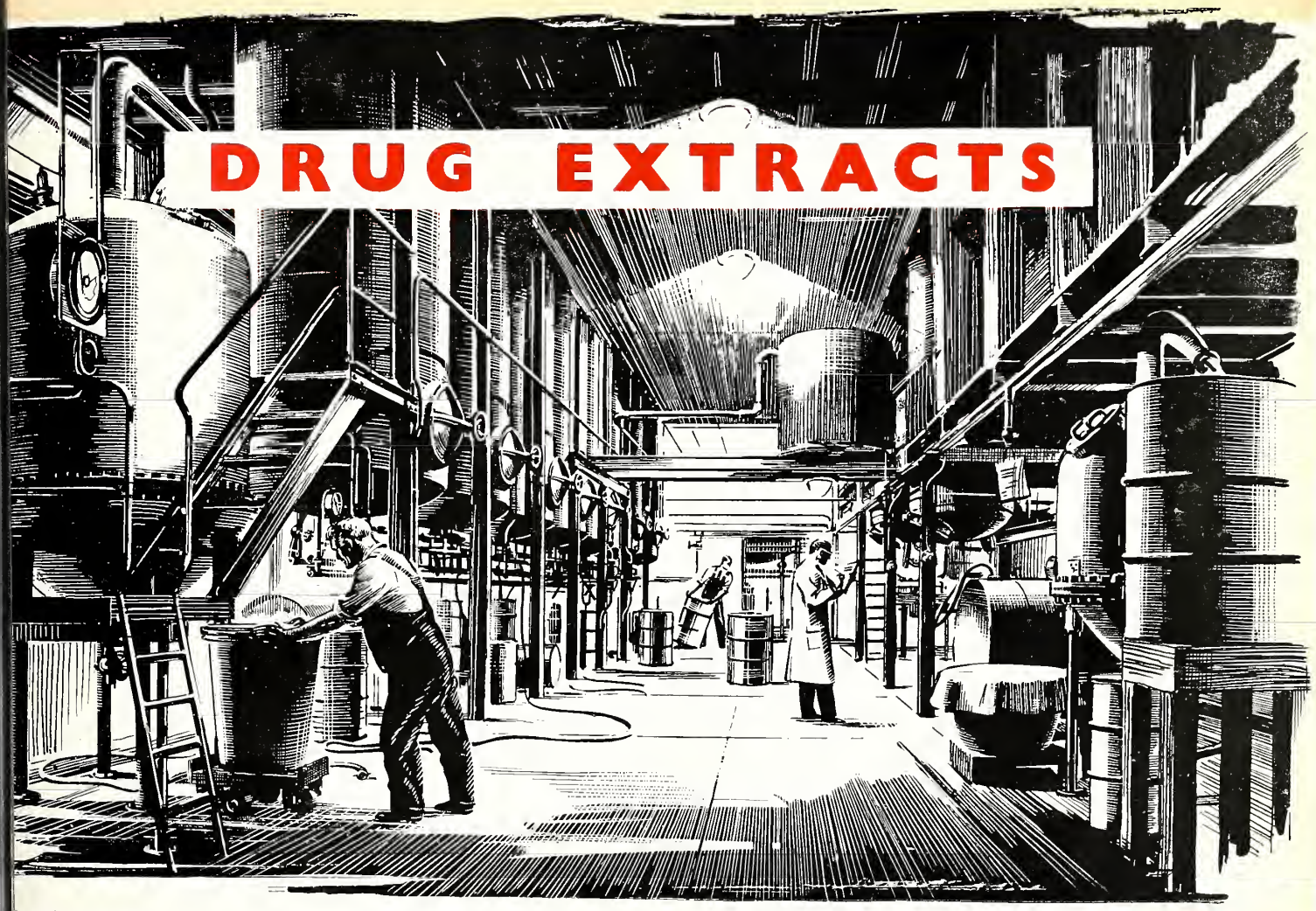
The
CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

JANUARY 18 1958



StaffordAllenS offer the longest experience in the preparation of fine medicinal extracts. Our high vacuum concentration process ensures full therapeutic activity. We manufacture liquid, granulated, powdered and standardized extracts; also concentrated extracts for the preparation of tinctures, infusions, liquid extracts, decoctions, confections, etc., etc.

May we quote you for your requirements?

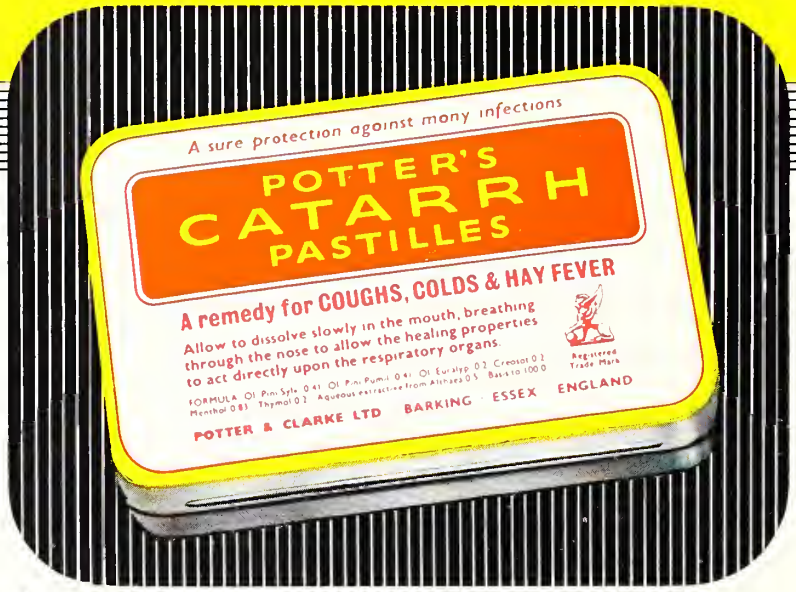
STAFFORD ALLEN & SONS LIMITED

WHARF ROAD, LONDON, N.1. Telephone: CLErkenwell 1000

StaffordAllenS

TAS/AL 437

ADVERTISED week after week on T.V. and in the Press



Retail 2/- a tin
Trade 13/6 a dozen

Potter's CATARRH PASTILLES

with the famous 'fighting formula'

ADVERTISING BOOSTS SALES

Potter's Catarrh Pastilles are being advertised throughout the winter on a scale that will bring them before the public in millions of homes. T.V. with its vast influence is being used on all four main channels as a regular Saturday feature. Other areas not covered by T.V. are being supported by sustained local Press advertising. Why not check your stocks now!

An Ideal Counter Display

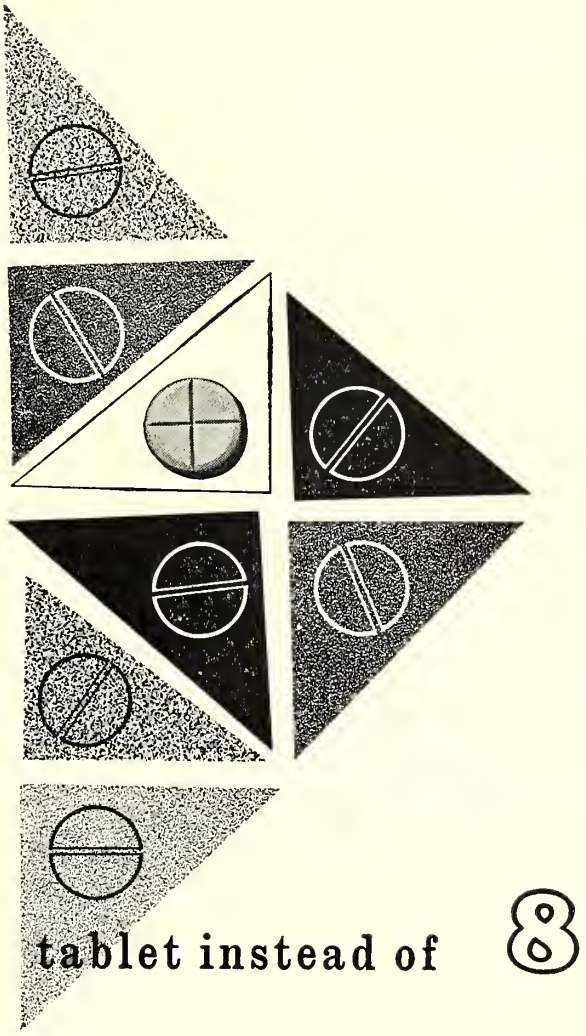
This eye-catching display outer to hold 1 dozen tins of Potter's Cotorrh Pastilles makes a fine counter attraction for impulse buying.

Also **POTTER'S CRYSTALLISED CATARRH PASTILLES**

made specially for those who prefer a 'sugary' taste. Firm favourites with children.

POTTER & CLARKE LTD · RIVER ROAD · BARKING · ESSEX · *Telephone:* **RIP***pleway* **3041**

a truly radical reduction in sulphonamide dosage



1 tablet instead of 8

The introduction of LEDERKYN Sulphamethoxypyridazine has radically changed the pattern of sulphonamide therapy. This is the first *long-acting* antibacterial sulphonamide to be offered for clinical use, and it is fully effective at a maintenance dosage of only ½ Gm. daily.
This is a reduction of some seven-eighths as compared with the typical sulpha drug dosage i.e. one tablet instead of eight. Improved tolerance and a welcome freedom from side effects result from this dramatic dosage reduction. Moreover, the swift absorption and efficient diffusion of LEDERKYN lend further emphasis to its clinical value—especially in treating genito-urinary infections.

Lederkyn*

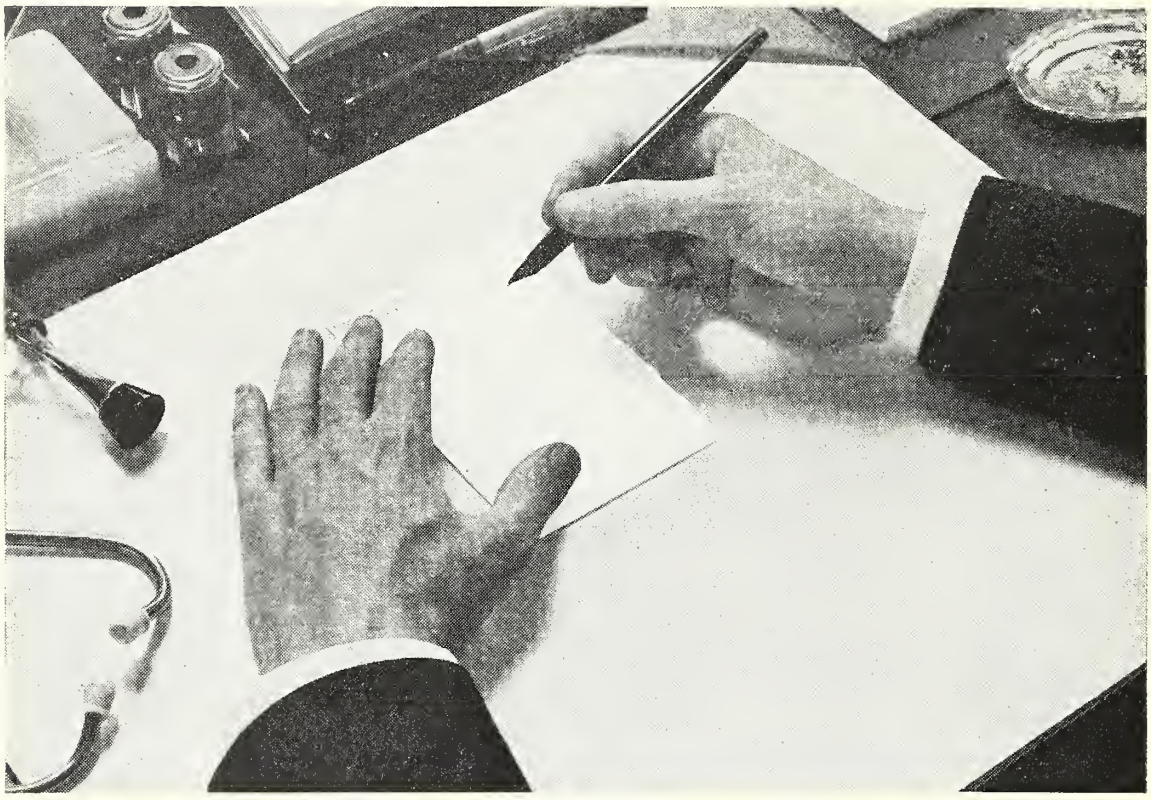
SULPHAMETHOXYPYRIDAZINE *REGD. TRADE MARK

Tablets (0.5 Gm.): bottles of 24, 100 and 500

Lederle

LEDERLE LABORATORIES DIVISION
Cyanamid OF GREAT BRITAIN LTD., London, W.C.2

A



He simply writes 'Codis' now

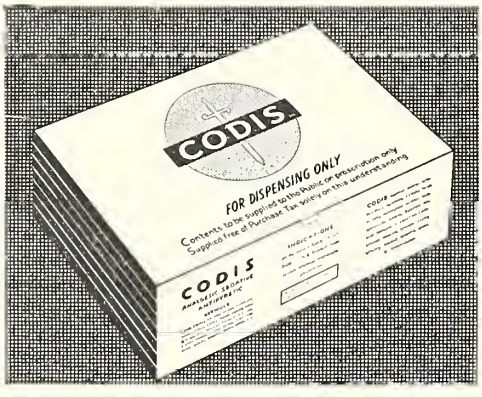
Doctors have long been aware of the value of compound analgesic preparations for the relief of susceptible pains and discomforts.

Now, it is generally agreed, a further advance has taken place in the analgesic field. Codis provides all the virtues of Tab. Codein. Co. B.P.—and more.

In Codis, agents have been added to solubilise the aspirin base of Tab. Codein. Co. In water, Codis provides—with codeine and phenacetin—calcium aspirin.

It is substantially neutral, and is therefore extremely well tolerated.

For these reasons the medical profession has widely endorsed Codis. You will find yourself dispensing it increasingly often.



CODIS REGD.

Composition. *Each Codis tablet contains: Acid Acetylsalicyl. B.P. 4 gr., Phenacet. B.P. 4 gr., Codein. Phosph. B.P. 0.125 gr., Calc. Carb. B.P. 1.2 gr., Acid. Cit. B.P. (exsic) 0.4 gr.*

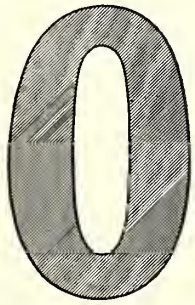
CODIS IS NOT ADVERTISED TO THE PUBLIC

DISPENSING PACK (Purchase Tax Free). 500 tablets in distinctive gold foils of 10 tablets each, 25/- per box.

PUBLIC SIZES. Pack of 20 tablets (in foil), 2/8 inc. P.T.; 8 tablets, 1/4 inc. P.T.

RECKITT & SONS LTD., HULL & LONDON, PHARMACEUTICAL DEPT., HULL

a significant advance in Sulphonamide Therapy



ONE

one tablet daily

Just one tablet a day affords

sustained **and effective blood-levels**

wide **antibacterial coverage**

adequate **urine levels**

effective **penetration into cerebrospinal fluid**

Midicel*

Tablets of 0·5 G in bottles of 12, 100 and 250

3-sulphanilamido-6-methoxypyridazine

* *Trade Mark*

Parke Davis & COMPANY LTD *inc* U.S.A.

Tel. Hounslow 2361 HOUNSLOW MIDDLESEX

And at Carfin Industrial Estate, Carfin, Lanarkshire. Tel: Holytown 326/7.

MEDIMPEX, BUDAPEST

ERGOTAMINE TARTRATE

B.P./U.S.P.

Sole Agents:

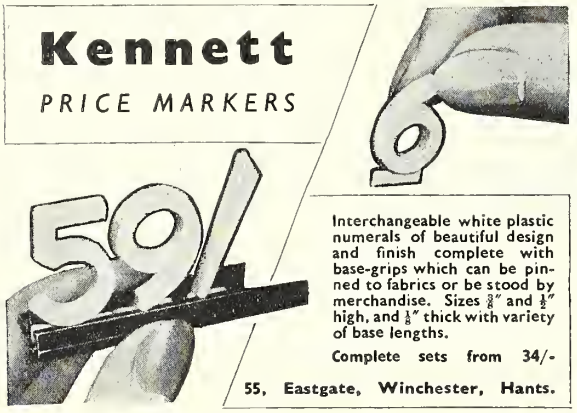
MONTANA (LONDON) LIMITED

10 ALBEMARLE STREET LONDON W 1

TELEPHONE : LEGATION 6288 TELEGRAMS : NOLATOM PICCY, LONDON CABLES: NOLATOM, LONDON

Kennett

PRICE MARKERS



Interchangeable white plastic numerals of beautiful design and finish complete with base-grips which can be pinned to fabrics or be stood by merchandise. Sizes ⅜" and ½" high, and ⅛" thick with variety of base lengths.

Complete sets from 34/-

55, Eastgate, Winchester, Hants.

BURROUGH'S

S.V.R. DOUBLY RECTIFIED

JAMES BURROUGH LTD.,
I CALE DISTILLERY LONDON S.E.11

CHEMIST'S DICTIONARY OF MEDICAL TERMS 7th Edition

Prepared primarily for pharmacists, the Dictionary is indispensable also for pharmaceutical manufacturers, advertising agents concerned with the marketing of medicinal products and indeed all who have to find their way around among the multifarious medicinal compounds of modern times.

Order direct from: PRICE 17/6, Postage 9d.

THE CHEMIST & DRUGGIST

28 ESSEX STREET, STRAND, LONDON, W.C.2

COX

THE MANUFACTURING AND PACKAGING SERVICE OF

ARTHUR H. COX & CO. LTD.

offers you

Over a century's experience in the production, development and manufacture of pharmaceuticals. Tablets, Pills, Pastilles, Creams, Ointments, Liquids, Suppositories and Specialities supplied in any quantity.

Superior, display-value packaging from high grade carton board and label paper.

Clear legible printing and many attractive colour schemes.

An OWN Name and Address scheme that covers everything.

ARTHUR H. COX & CO. LTD. · BRIGHTON · ENGLAND

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The place of DISPRIN to-day

The very general acceptance which Disprin has won stems simply from its analgesic superiority, based on two qualities.

It is soluble; and it is substantially neutral. Consequently, Disprin is quick-acting and far less likely than ordinary aspirin to upset the stomach.

These notable advantages are now very widely appreciated. Medical opinion of to-day is overwhelmingly in support of soluble aspirin. And this opinion is increasingly reflected in the attitude of the public.

The advantages of Disprin are clearly explained through the medium of advertising to millions of readers of the national daily and national Sunday papers, and also to viewers of commercial television in London, the Midlands, and the North.

In these circumstances, it is only natural that more and more people, grasping the advantages of Disprin, are demanding it for the relief of headache, colds, neuralgia, sciatica, rheumatism, and kindred ailments.

DISPRIN REGD.

RETAIL PRICES (*incl. P.T.*) 50-tablet bottle 3/3; 26-tablet bottle 1/11½; 8-tablet foil 9d.

TRADE PRICES (*excl. P.T.*) 50-tablet bottle 23/- doz.; 26-tablet bottle 13/10 doz.; 8-tablet foil 5/2 doz.

RECKITT & SONS LTD. HULL & LONDON PHARMACEUTICAL DEPT., HULL

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Rolicton

BRAND OF AMISOMETRADINE

The NEW Searle Oral Diuretic

gives continuously effective diuresis

- on **simple b.i.d. dosage**
- with absolutely **minimal gastric upset**
- without developing resistance to its action
- with no significant risk of potassium depletion
- and without the toxic hazards of carbonic anhydrase inhibitors or mercurials

Available as uncoated, pale green tablets of 400 mg. in the following pack sizes:

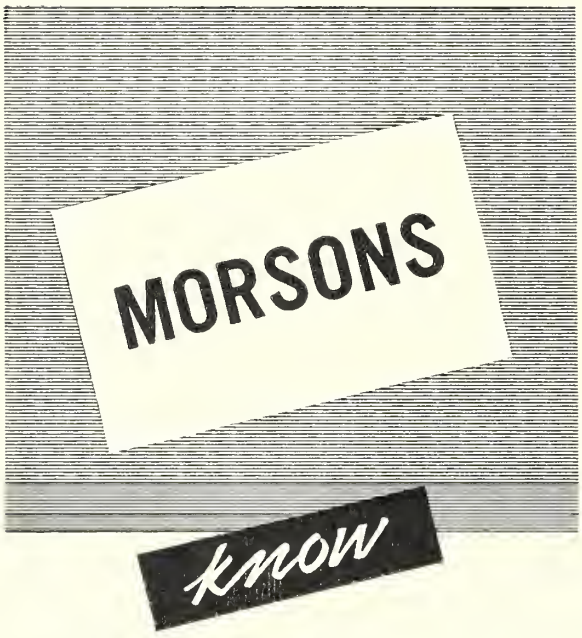
	Retail Price
Bottle of 20 tablets	15/9
,, ,, 100 ,,	73/4
,, ,, 500 ,,	340/-

Subject to the usual discounts.

SEARLE

G. D. Searle & Co. Ltd., High Wycombe, Bucks.
Tel. High Wycombe 1770

***Rolicton** is a Registered Trade Mark*



CITRATES

For more than a century, Morsons have been making chemicals for industry and the pharmacist. The technical supremacy which comes from so long an experience is today an intangible but nonetheless invaluable element in every Morson product.

POTASSIUM CITRATE B.P.

SODIUM CITRATE B.P.

If you have a chemical problem, Morsons are at all times glad to place their knowledge and technical resources at your disposal.

THOMAS MORSON & SON LTD.
PONDERS END, MIDDLESEX

ARE YOU STOCKING

Mellojuce
Regd.

DIABETIC FRUIT JUICES

AND

TOMATO COCKTAILS

Enquiries are being received from all parts. So stock to meet the demand.

MELLOJUCE LIMITED
8 HOWARD STREET, GT. YARMOUTH
TELEPHONE: 4344

GEORGTON

BABY PANTS

for the well-dressed Baby

Covered in Nylon and the latest Rayon Designs, and lined with a very soft Plastic. Designed and cut to ensure perfect comfort for the Baby.

★ **At Popular Prices.**

Wholesale and Shipping only.

Ask your Wholesaler to show you this range in the new **carton for counter display**

GEORGE HIGTON LIMITED
WINDMILL ROW, LONDON, S.E.11.

Inability to take aspirin . . .

IT WAS RECENTLY reported (*Brit. Med. J.*, 1 : 444, 1957) that of 178 rheumatic patients, 25% could not take plain aspirin in adequate dosage.

Of this 25%, however, the great majority tolerated a modified aspirin such as Paynocil.

Not only are Paynocil tablets usually well tolerated by the stomach (even on the heavy dosage needed for rheumatoid arthritis), but they are extremely palatable, disintegrate instantly on the tongue without water, and cause no discomfort or unpleasant after-sensation.

. . . indicates PAYNOCIL

non-irritant, palatable, quick-dispersing aspirin

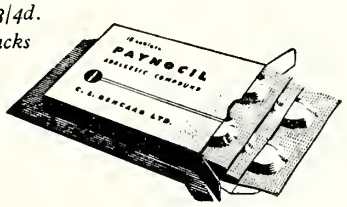
FOR ADULTS

PAYNOCIL

EACH TABLET CONTAINS

Acetylsalicylic acid ..... 10 grains
Aminoacetic acid..... 5 grains

PACKAGES in sealed foil strips: *Cartons of 18: Retail Price 3/4d.*
Dispensing packs of 240: Trade Price (tax free) 21/8d.



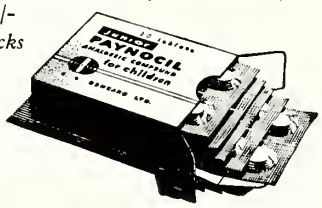
FOR CHILDREN

Junior PAYNOCIL

EACH TABLET CONTAINS

Acetylsalicylic acid ..... 2½ grains
Aminoacetic acid ..... 1¼ grains

PACKAGES in sealed foil strips: *Cartons of 20: Retail Price 2/-*
Dispensing packs of 240: Trade Price (tax free) 12/-



Detailed recommendations for dosage in rheumatoid arthritis will be gladly supplied on request

603 Ph./65(68)/1

C. L. BENCARD LTD. PARK ROYAL, LONDON, N.W.10

B

Messrs. May & Baker, Ltd.
request the pleasur
M&B

WE INVITE ENQUIRIES FOR BARBITURATES

Here is a selection from our wide range:

ALLOBARBITONE B.P.C. · AMYLOBARBITONE B.P.C. · AMYLOBARBITONE SODIUM B.P.C. · BARBITONE B.P. · BARBITONE SODIUM B.P. · CYCLOBARBITONE B.P.C. CYCLOBARBITONE CALCIUM · HEXOBARBITONE B.P. · HEXOBARBITONE SODIUM B.P. · METHYLPHENOBARBITONE B.P. · PHENOBARBITONE B.P. · PHENOBARBITONE SODIUM B.P. · QUINALBARBITONE QUINALBARBITONE SODIUM B.P. *SEC*-BUTOBARBITONE · *SEC*-BUTOBARBITONE SODIUM

Barbiturates

PHA998

MANUFACTURED BY MAY & BAKER LTD · DAGENHAM TEL: DOMinion 3060 · EXT. 317

From the Calmic range –

PREPARATIONS

of proven effectiveness

SEDUMAX *An innocuous sedative and analgesic combination, indicated for the relief of insomnia due to neuralgic pain, pre-menstrual tension and other symptoms of psychosomatic disturbances. Vitamin B1 has been included in the formula for its beneficial effect in cases of nervous exhaustion and mental depression.* **Packs: 50 and 300 tablets.**

DRAPOLENE *For the speedy, soothing relief of napkin rash. This gentle cream was evolved specifically for the prevention of urinary dermatitis in infants and incontinent patients.*
2-oz. tubes and 1-lb dispensing jars.

FERROMYN *For the treatment of iron deficiency anæmias, particularly during pregnancy. Ferromyn contains ferrous succinate, an organic iron salt which can be absorbed into the system with minimal toxic effects.* **Dosage: 1 teaspoonful/tablet t.d.s. or as prescribed. Packs: 4-oz., 20-oz., 40-oz., 80-oz. Bottles: 100 tablets, 1,000 tablets.**

CICATRIN *An amino acid antibiotic cream or powder with the dual effect of controlling local infection and stimulating the growth of new tissue. Indicated for the treatment of superficial wounds, burns, varicose ulcers, rectal surgery and pyogenic skin conditions.*
Packs: 15 gramme collapsible tube. 15 gramme sprinkler.

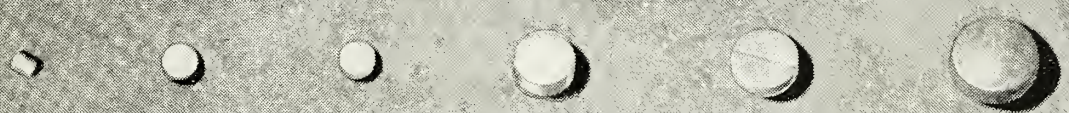
HYPON *Ideally balanced analgesic tablets which contain Codeine, phenacetin and acetylsalicylic acid plus caffeine and phenolphthalein to offset the side effects of depression and constipation.* **Packs: 10, 50, 125. Tax-free dispensing packs 300, 600 tablets.**

POLYBACTRIN *The first-ever antibiotic powder spray. A combination of antibiotics which do not induce resistant strains are dispersed in ultra-fine powder form to secure bacterial inhibition over a wide area and ensure immediate contact with any wound pathogens. Indicated for all branches of surgery and for use on any broken tissue surface as prophylactic or treatment.*

CALMIC LIMITED

CALMIC LIMITED
Crewe: *Crewe 3251-5* · **London:** 2 Mansfield Street · W1 · *Langham 8038-9*
Australia: 458-468 Wattle Street · Ultimo · Sydney · NSW
Canada: Terminal Building · York Street · Toronto

IF YOU ARE LOOKING FOR A TABLET MANUFACTURER TO HANDLE YOUR PRODUCT
BE IT LARGE OR SMALL, IN THOUSANDS OR MILLIONS, WHY NOT



CONTACT ONE OF THE FOREMOST MAKERS WHO HAVE TAKEN PRIDE IN

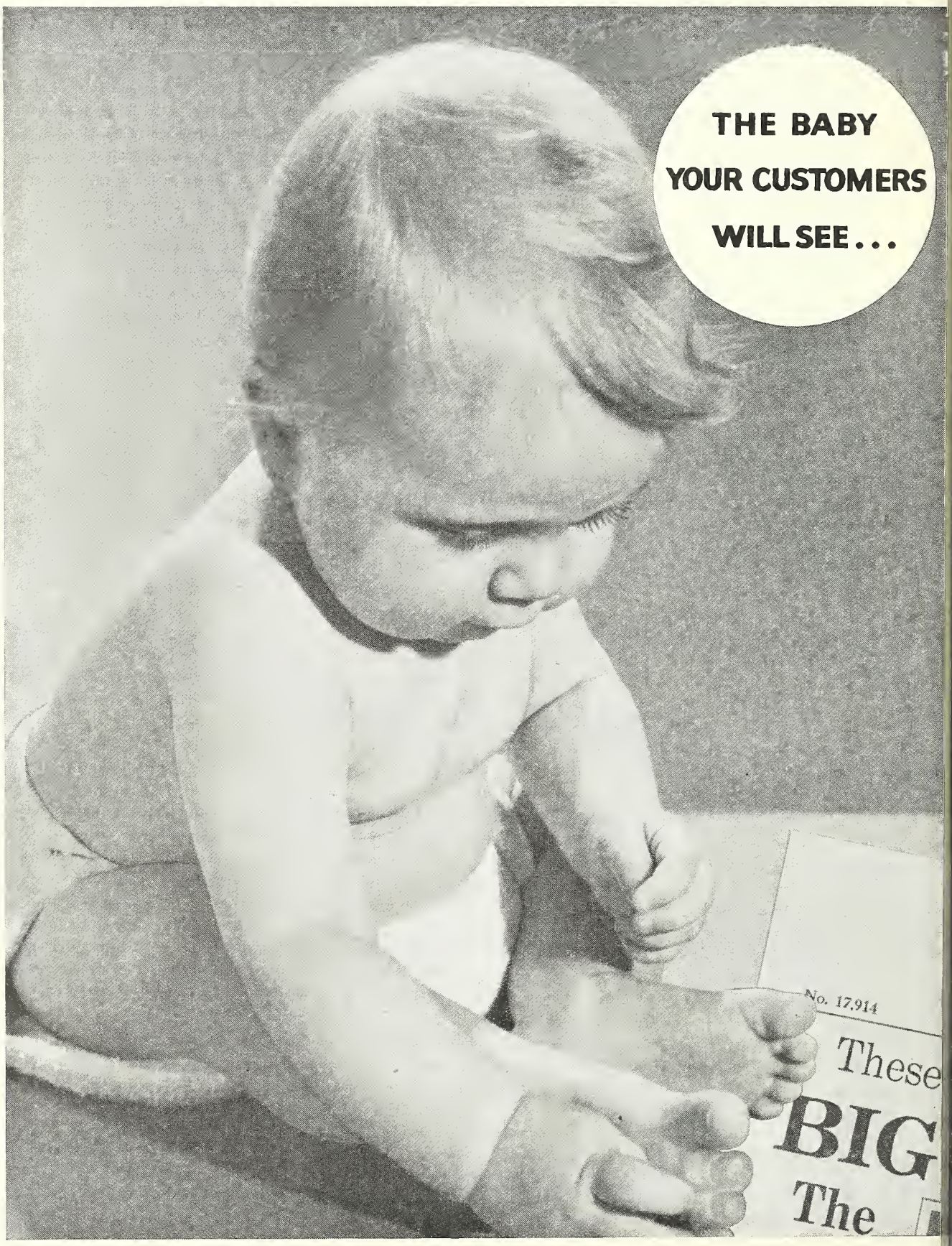
MANUFACTURING TABLETS & PILLS FOR MANY YEARS

RICHARD DANIEL & SON, LTD. DERBY
Write us at Mansfield Road or ring Derby 40671 (Eight lines)

Repair Service
OF
ELECTRIC BLANKETS

Denhams' factories have unmatched experience in repair and overhaul for the trade of ELECTRIC BLANKETS & PADS of all makes, British & Foreign.
LARGEST AND LONGEST ESTABLISHED
RAPID 5 DAYS' SERVICE
Nationally known for thoroughly reliable and inexpensive repairs. Free estimates on request.
Service Department :—
DENHAMS (NCH) LIMITED
ST. GEORGE'S WORKS, ALL SAINTS ROAD, LONDON, W.3
★ NORVIC LOW VOLTAGE ELECTRIC BLANKETS WERE SELECTED FOR USE BY THE TRANS-ANTARCTIC EXPEDITION

MAKERS OF Norvic AND CORONA ELECTRIC BLANKETS
USED THE WORLD OVER


THE BABY
YOUR CUSTOMERS
WILL SEE...
No. 17,914
These
BIG
The

a powerful pair!

MEET OUR NEWEST BABY! He'll be taking his bow on January 24th—in Glaxo's latest ½ page advertisement in the Daily Express. That means he'll be working hard for *you*—selling Ostermilk and Farex all over the country.

Glaxo's powerful campaign for Ostermilk and Farex is in full swing now—and it will continue for many months to come. No baby talk in *these* advertisements! Glaxo are telling mothers what they want to know; why they can, and should, trust their children to Glaxo care. Glaxo are stressing the extensive scientific experience that lies behind Ostermilk and Farex . . . talking the way no other maker of baby food has talked—or *can* talk—ever.

The advertisement pictured is the fifth in a series telling the Glaxo story in the Daily Express, Daily Mirror, Woman, Woman's Own and in many other big circulation publications. These advertisements have been placed so as to reach *almost every mother in the country.*

Profit from the confidence created by this original and persuasive advertising. Check your stocks of Glaxo's Ostermilk and Farex now. Make sure you've enough to keep all your customers' custom.

OSTERMILK AND FAREX

ADVERTISEMENTS WILL BE SEEN BY OVER 12 MILLION READERS OF THE

DAILY EXPRESS

. . . IN THE PAPER MILLIONS WILL READ

16,000,000 WOMEN
WITH SPRING CLEANING ON THEIR MINDS

and a big campaign to put

GLOVELIES
FABRIC-LINED PLASTIC HOUSEHOLD GLOVES

ON THEIR HANDS

It's all lined up and ready to go—an intensive new advertising campaign for Glovelies.

Beginning early in February impelling advertisements will appear in *Woman's Weekly*, *Woman's Own*, *Woman's Illustrated* and the new *Woman's Realm* with its guaranteed circulation of one million copies a week. Every advertisement in the campaign will be seen by millions of women—and just at the moment they are thinking about Spring-cleaning and what it could do to unprotected hands.

ON T/V TOO!

In London and the South they will see—and hear—about Glovelies on commercial television as well, and you know already how T/V advertising leads to extra sales.

WHY—AND HOW—
YOU WILL SELL MORE GLOVELIES

Remember, Glovelies, blue Northplastic house gauntlets with *knitted* fabric lining last many times longer than rubber, feel far more comfortable, look more becoming, and retail at only 5/8d. a pair. Glovelies sales go up and up and this well-timed campaign will signal a boom in them.

FREE A wire counter dispenser is available to stockists placing an order for 3 doz. Glovelies and/or Northands, or a floor-standing wire unit can be had on receipt of orders for 6 doz. Glovelies and/or Northands.

AS WELL AS GLOVELIES—

remember to check your stocks of these ever-more-popular North domestic gloves:—Polka Dot Jersey Gloves, 3 colours but one size, 3/8 per pair; White Drill Gloves, one size, 2/6d. per pair; and Northands plastic gloves for men, 6/11d. per pair.

JAMES NORTH
DISTRIBUTORS LTD

KIRKMAN HOUSE,
54a Tottenham Court Road, London, W.1
Telephone: LANgham 4811

SPECIAL DISPLAY BONUS

gives you 5% EXTRA on £3 RADIAN ORDERS!

An extra 5% profit is yours in return for a fortnight's window display. This bonus is given on all direct orders of £3 and upwards (excluding P.T.) comprising any combination of Radian products, which include:

RADIAN-B Aspirin Spirit Liniment
RADIAN-*a* Spirit Dressing
RADIAN MASSAGE CREAM
RADIAN SOOTHING CREAM
RADIAN BATH SALTS
RADIAN OVALS

All direct orders can be charged through your wholesaler if you wish.

Radian products are backed by *year-round* advertising in national and provincial newspapers, sporting journals and women's magazines.

NEWS FLASH—

In mid-January Radian-β will be advertised on the new Independent Television Station for South Wales and the West of England. This campaign will be supported by advertising in local newspapers and theatres, and by regular advertising in the National Press. Place your orders now to ensure adequate stocks.

Send your order to : Radiol CHEMICALS LIMITED

78 Upper Richmond Road, London, S.W.15 Tel.: VANdyke 1642 and 2692

TV · WOMEN'S MAGAZINES · PAPERS

MOTHAKS

MILLIONS OF WOMEN WILL SEE MOTHAK ADVERTISING THIS YEAR

Your customers will see MOTHAK advertising everywhere telling them that MOTHAKS protect their families' clothes from moth damage. They'll be looking for the "Purple Packet" on your counter.

LOOK AT THE PAPERS AND MAGAZINES WHICH WILL CARRY MOTHAK ADVERTISING.

DAILY MIRROR
DAILY SKETCH · SUNDAY PICTORIAL
NEWS OF THE WORLD · WOMAN
WOMAN'S OWN · WOMAN'S WEEKLY
WOMAN'S WORLD
WOMAN'S COMPANION · HOME NOTES
HOME CHAT · WIFE AND HOME
MY HOME · WOMAN'S JOURNAL
RADIO TIMES
TV TIMES, LONDON EVENINGS, ALL LEADING PROVINCIAL PAPERS

And in addition: WOMAN'S DAY and WOMAN'S REALM, Britain's newest Women's magazines.

New MOTHAK DISPLAY UNIT

Sent with all 2½% bonus orders. Takes up no more room than a box of MOTHAKS—it will help you sell more of all three products.

A set of special DAY-GLO cards will be included.

PLUS
AN EVEN BIGGER
TV SERIES
ON ALL STATIONS
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BONUS OFFER means GREATER PROFITS FOR YOU

5/- SPECIAL DISCOUNT
ON EVERY GROSS OF MOTHAKS
for immediate delivery or by 1st April.

PLUS

2½% EXTRA DISCOUNT
off the TOTAL ORDER when you include a minimum of
1 doz. MOTHAK FLY SPRAY
1 doz. MOTHAK POWDER
¼ gross PARADOR AIR FRESHENER

MOTHAK FLY SPRAY

Special advertising will tie in with Ministry of Health campaign.
MOTHAK FLY SPRAY is efficient, economical, lavender perfumed and more popular than ever. Sales doubled in 1957—make sure of your share of the even bigger sales and profit this year.

MOTHAK POWDER

Lavender perfumed. Easy to use Puffer Pack. Protects carpets, and upholstery against moth damage.

ORDER NOW

MAKE CERTAIN YOU INCREASE YOUR PROFIT FROM EARLY SALES AT GREATER DISCOUNTS

THOMPSON & CAPPER LIMITED · LIVERPOOL, 19

For quantity terms and bonus offers see B.D.H. Information October 1957 or ask the B.D.H. representative

THE BRITISH DRUG HOUSES LTD · LONDON

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Manufacturers of Drug Extracts and Fine Chemicals

ACONITINE
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Big NEW advertising campaign now starting!

Yes, here's a money-spinner for you! OPTABS, the new TABLET Eye Lotion, is the only Eye Lotion to contain Chemophyll Brand of Adrenalin which is so effective in relieving eyestrain and giving bright, healthy eyes. Big advertisements will be appearing every month in The Sunday Pictorial, The People, The Sunday Express, Woman's Sunday Mirror and in TV Times. Every month these will be seen by over 45,740,000 people, many of whom will want OPTABS, the TABLET Eye Lotion. Watch out for the OPTABS TV advertising which has been booked.

Are your stocks adequate to meet the demand from 45 MILLION potential customers. ***ORDER NOW!***

Optabs

Regd.

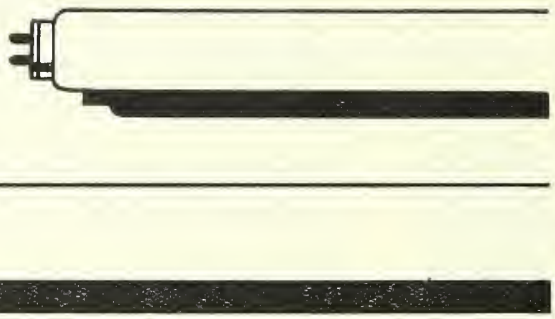
THE NEW TABLET EYE LOTION

Kit Pack (including Eye Bath) retails at 2/6
Refills (a month's supply) retail at 2/-
Generous trade terms and display material available. Special Bonus Offer in return for point of sale display.

Optabs Ltd., Kemtheutic House, Grant St., Bradford 3

and seasonal T.V. to follow

Think of it...a year's guaranteed light with Osram Tubes



The *superb quality* of Osram tubes enables us to offer a *guarantee* with every tube that it will be replaced FREE if it fails in normal service before 3,000 hours or one year whichever is the shorter. *And you still have the well known high light figures for the first 5,000 hours use.*

It makes sense to specify —

Osram

THE GUARANTEED TUBE

A G.E.C. Product The General Electric Co. Ltd.

COLOUR PAGES in the women's magazines, *big spaces in the national press*, 30 second T.V. commercials. They're all saying the same thing—look for the 'Alkathene' label. We're telling your customers that 'Alkathene' is the finest polythene they can buy. When they come to your shop to buy houseware they'll look for that vital 'Alkathene' label.

Are you ready to meet this growing demand? Make sure your stocks carry the 'Alkathene' label. Give them a good display, so that you profit from this great advertising effort.

FREE DISPLAY MATERIAL

to link your shop with 'Alkathene' national advertising, is available on application through your usual trade channels or direct to Publicity Dept., Plastics Division, Imperial Chemical Industries Ltd., Welwyn Garden City, Herts.

Shelf cards can be obtained from individual manufacturers.

'Alkathene' is the registered trade mark for the polythene manufactured by I.C.I.

IMPERIAL CHEMICAL INDUSTRIES LIMITED · LONDON · S.W.1

A.H.30

when the garden gate seems miles away

. . . and rheumatic pains are most severe, Anabalm cream is clearly indicated. Developed as an adjunct in the treatment of rheumatic and myalgic conditions, Anabalm provides— the sustained relief of long-acting salicylate and capsicum; the vaso-dilatory effect of histamine; the rubefacient action of menthol. Anabalm, with a vanishing cream base, is non-greasy; its content of squalene ensures maximum absorption of all the therapeutic ingredients.

ANABALM TRADE MARK

FORMULA:
Squalene 10%
β-Chloroethyl Salicylate 10%
Oleoresin of Capsicum 0·1%
Menthol 4%
Histamine Hydrochloride 0·1%

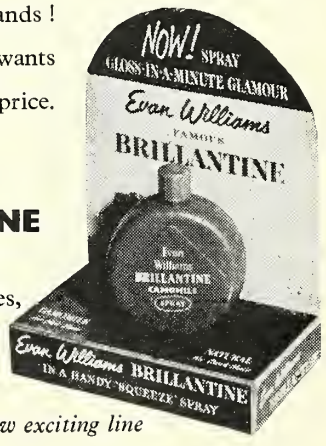
PACKING: 1 oz tube 3/7½ inc. P. Tax

THE CROOKES LABORATORIES LIMITED · 1 CLEMENTS INN · LONDON W C 2 · PHONE: HOLBORN 4743

ANOTHER BEST SELLER FROM Evan Williams...

THE FAMOUS BRILLANTINE IN A SMART NEW SPRAY PACK

Here's a bright new version of the popular Evan Williams Brillantine—packed with the maximum sales appeal in a smart and handy squeeze-spray plastic bottle. This attractive pack sprays the brillantine quickly, easily and evenly on to the hair and keeps it *off* the hands! It's just what the beauty-conscious woman wants for her dressing-table, at the right kind of price. It's just what *you* need for extra profits!



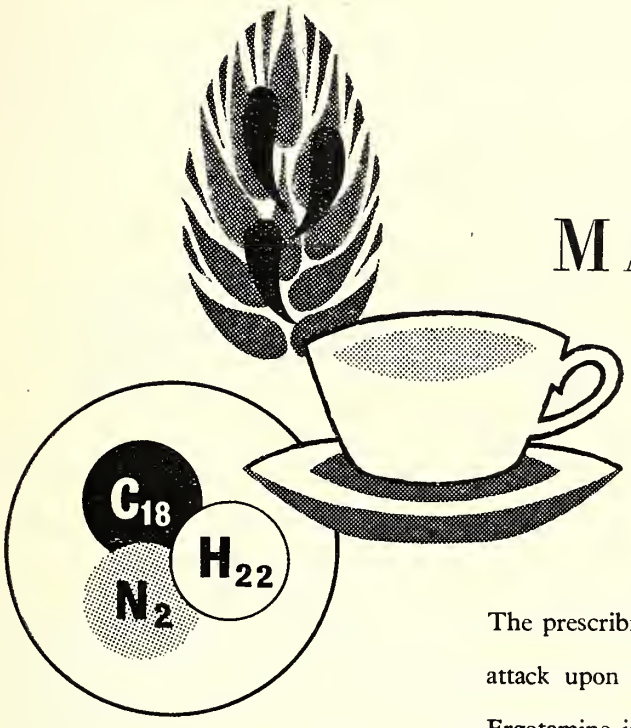
STOCK UP NOW WITH **EVAN WILLIAMS BRILLANTINE**

The New Spray Pack comes in two shades only—Natural for Dark Hair · Camomile for Fair Hair. Retail price 5/- each. Trade price 25/- per doz plus tax, subject to reduction in £4 and £8 parcels.

The popular 2/- bottle size continues in 4 shades, Natural, Camomile, Blue and Red.

This special Display Stand will help to sell this new exciting line

EVAN WILLIAMS COMPANY LIMITED · AINTREE ROAD · PERIVALE · GREENFORD · MIDDLESEX



today's new MASTER PLAN *against migraine*

Each tablet contains ergotamine tartrate 2 *mgm.; caffeine (alkaloid)* 100 *mgm.; cyclizine hydrochloride* 50 *mgm.*
In bottles of 10 *and* 100

The prescribing of 'Migril' makes possible at last a *planned* attack upon the three predominant symptoms of migraine. Ergotamine is present at strength in 'Migril' for its specific effect upon the characteristic headache and ocular disturbances. Caffeine is present too, since it acts as a synergist to ergotamine. Frequently, however, ergotamine tends to evoke nausea and vomiting on its own account and can therefore worsen these aspects of the condition. For this reason, the potent, rapidly acting anti-emetic cyclizine is also included in 'Migril'—to overcome any tendency to nausea or vomiting, whether caused by the ergotamine or by the condition itself. And so successfully does cyclizine achieve this aim that truly effective oral doses of ergotamine can today be given—by means of 'Migril'.

'migril' TRADE MARK

BURROUGHS WELLCOME & CO., LONDON
(THE WELLCOME FOUNDATION LTD.)

E

cash in on Britain's biggest COLOUR advertising campaign for Britain's first COLOUR shavers!

BE READY TO MEET THE DEMAND! ORDER FROM YOUR WHOLESALER TODAY!

Sunbeam Electric Ltd., Nerston, East Kilbride, Glasgow

SUN 9828

Sunbeam are FIRST in Britain with shavers in COLOUR! So Sunbeam are telling millions of readers about it through big *colour* advertisements in all the following mass-circulation magazines — *Readers Digest. John Bull, Illustrated, Weekend, Everybody's,* backed up by black and white advertisements in the *Daily Express* and *Sunday Express.*

Advertisements in the above will feature this complete range of famous Sunbeam shavers—

Sunbeam

Silver glide SHAVEMASTER

— IN 6 ATTRACTIVE COLOURS

Standard Model XC
AC/DC mains 210/250v.
£10 . 15 . 2 inc. tax.

Dual Volt Model XCR
AC/DC mains 100/140v.
190/250v. £11 . 18 . 6 inc. tax.

MODEL W SHAVEMASTER NOW BETTER VALUE THAN EVER!

Standard Model WZA Shavemaster,
now only— £8 . 8 . 0 inc. tax.
Dual Volt Model WRA Shavemaster,
now only—£9 . 9 . 0 inc. tax.

Lady Sunbeam
SHAVEMASTER
with exclusive Micro-Twin Head designed especially for feminine use. In three colours. £5 . 17 . 6 inc. tax.

Sunbeam Mixmaster

Sunbeam Mixmaster Junior

Sunbeam Frypan-Cooker

Sunbeam Ironmaster

ST

'ANOTHER
bottle of PLJ
please...'

For thirty-five years PLJ Ltd. has specialised in bottling lemon juice. Today women buy more PLJ natural lemon juice than all the other brands put together (and then some). A fast-moving line that brings customers back time and time again.

PLJ LTD., CROYDON

THE CHEMIST AND DRUGGIST

ESTABLISHED 1859

The weekly newspaper for pharmacy and all sections of the drug, pharmaceutical and fine chemical, cosmetic, and allied industries

Official organ of the Pharmaceutical Society of Ireland and the Pharmaceutical Society of Northern Ireland

Volume 169 January 18, 1958 No. 4065

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ANNUAL SUBSCRIPTION
which includes The Chemist and Druggist Diary and Year Book, £2 10s. Single copies one shilling each.

For the treatment of coughs

'ROMILAR'

in three forms

'ROMILAR' Syrup

dextromethorphan hydrobromide 15 mg. in each 5 c.c.

BOTTLES OF 100 c.c. AND 500 c.c.

'ROMILAR' Tablets

dextromethorphan hydrobromide 15 mg. in in each tablet.

PACKINGS OF 20, 100 AND 200.

FOR USELESS COUGH

and for habit cough following whooping cough, measles and bronchitis. It is particularly useful for the suppression of cough when the patient is seriously ill and in need of sleep ; in the advanced stages of pulmonary tuberculosis and in congestive cardiac failure. It can also be of great benefit for suppressing cough caused by reflex irritation such as is associated with tumour of the lung, larynx or mediastinum.

'ROMILAR' Expectorans

dextromethorphan hydrobromide 15 mg. Ammonium chloride 300 mg. in each 5 c.c.

BOTTLES OF 100 c.c. AND 500 c.c.

FOR PRODUCTIVE COUGH

In infections of the respiratory tract, particularly when there is secretion of thick tenacious sputum, 'Romilar' Expectorans can be given to increase the flow of mucus, thus liquefying the secretion and making expectoration easier.

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The CHEMIST AND DRUGGIST

Volume 169 JANUARY 18, 1958 No. 4065

Oral Penicillin Tablets

TEMPORARY OPTION FOR DISPENSERS

FROM February 1 until further notice pharmacists are being advised that they may supply, when phenoxymethyl penicillin tablets of unspecified strength are prescribed on EC10 forms, tablets of either 120- or 240-mgm., or 125- or 250-mgm., content.

The matter arises because, according to a statement issued by the Ministry of Health, the British Pharmacopœia, 1958, due to be published on March 1 and to be become official on September 1, lays down standards of 125 mgm. and 250 mgm. for the strengths that are to be supplied when no strength is specified by the prescriber.

The instruction included in the British National Formulary, 1957, is to supply 120-mgm. or 240-mgm. tablets in such circumstances.

The Ministry notes "a tendency for manufacturers to change from strengths of 120 and 240 mgm. to those of 125 and 250 mgm.," and gives the advice that, since the tablets are likely to be available in both sets of strength for some time, and the difference between them is so slight, EC10 prescriptions for the tablets may, from February 1 until further notice, be dispensed from either set of strengths. A notice to contractor pharmacists giving detailed information on the proposal, including directions for endorsement of prescriptions, is being prepared and will be issued shortly.

Animal Medicines

TESTING SCHEME ANNOUNCED

THE Agricultural Research Council has initiated a scheme for testing veterinary therapeutic substances. After discussions with the British Veterinary Association and the Association of British Pharmaceutical Industry it has created a Veterinary Therapeutic Testing Board on which various interested bodies are represented as follows:—

ROYAL COLLEGE OF VETERINARY SURGEONS (Mr. J. B. White).

BRITISH VETERINARY ASSOCIATION (Messrs. J. W. Bruford and E. Wilkinson; Professor A. Robertson, F.R.S.E.).

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN (Dr. G. Brownlee and Dr. K. R. Capper).

ASSOCIATION OF BRITISH PHARMACEUTICAL INDUSTRY (Mr. R. Paisley).

MEDICAL RESEARCH COUNCIL (Dr. F. H. K. Green, C.B.E.).

Other members: Messrs. N. Bailey and W. S. Gordon, C.B.E., Dr. R. Scarisbrick.

The Board determines the conditions of a test and obtains from the proposer a detailed description of the medicament and its composition. Other relevant data must be supplied, such as the purpose of the preparation in preventing, treating or controlling a disease. A formula not disclosed to the public requires a different procedure. Its proposer must furnish all the available information known to him about the product for test. Towards confidential disclosures of substances or ingredients the Board undertakes to show the greatest respect. Veterinary officers concerned with the test are bound by the same observance of confidences. Circumstances relating to a "secret" product would govern the publication of any report dealing with it. The Board would have the power to postpone publication of such a report. Each report will contain the results of any testing procedure and the conclusions that may have been drawn from them. It will include a summary. When completed the report must have the Board's approval before being passed to the manufacturer for his comments. Tests are being undertaken at the request of a manufacturer or his import agent, or may be prompted by the Royal College of Veterinary Surgeons, British Veterinary Association, Agricultural Research Council (or one of its committees or conferences) or by the Veterinary Therapeutic Testing Board. The veterinary practitioners concerned with a test are being nominated by the British Veterinary Association and they, in conference with others interested, will elect a working party to be responsible for the whole procedure.

Health Service Pay

5 PER CENT. CLAIM DEFERRED

THE claim for an increase of 5 per cent. in the pay of 40,000 Health Service clerical workers (see *C. & D.*, January 4, p. 2) has been deferred to allow a new scale of salaries to be drawn up. A 3 per cent. increase was deferred by the Government in October. The workers then applied an overtime ban, which was lifted recently. The claim for a 5 per cent. increase for employees earning up to £1,200 a year was to have been put on January 8 to the Health Service clerical and administrative workers' Whitley Council meeting. When the Council met, the management asked that the claim should be deferred until February 12, so that measures could be considered to give effect to the report of Sir Noel Hall, who has recommended a complete reconstruction of the grading scheme for the Health Service. The staff side agreed and it was decided to set up a joint committee of staff and management to fix new salary scales. That committee is meeting on January 28.

Trade Exhibitions

FACILITIES IN BRITAIN

After surveying trade associations' views on the future of trade fairs in Britain, the council of the Federation of British Industries has approved the appointment of a committee of inquiry to consider present exhibition facilities in Britain and if necessary to recommend plans for extending them. The committee consists of representatives of exhibition organisers, exhibition contractors, and exhibitors. Mr. W. Marrable (head of exhibitions department, Imperial Chemical Industries, Ltd.) is the exhibitors' member. The inquiry is expected to take at least six months.—The council of Birmingham Chamber of Commerce decided on December 23, 1957, that the British Industries Fair should be wound up. That decision fol-

FORMALLY INSTALLED: Mr. H. G. Moss (president, 1958–59, of the Proprietary Articles Trade Association) is invested with his chain of office by the outgoing president (Mr. Leslie G. Smith). The ceremony took place at the council's quarterly meeting in London on January 9 (see p. 59).

lows the publication of the results of a survey by the Federation of British Industries (see *C. & D.*, December 14, 1957, p. 632) which revealed that industry favoured specialised fairs instead of general ones.

Examination Results

INTERMEDIATE PASSES

THE following candidates satisfied the examiners in the Intermediate examination held by the Pharmaceutical Society in Scotland in December 1957:—

ALLAN, J. M., Glasgow; BROWN, A. J., Glasgow; BROWN, C. C., Cottingham; BROWN, M. J., Doncaster; CAMPBELL, D. W., Stirling; CHOWDHURY, R. K. R., Sunderland; COHEN, B. R., Leeds; COLLEGE, Patricia, Gateshead; FERGUSON, Jemima, Glasgow; GEDAY, A. A. Galashiels; GOLDSTON, Juliet A., Stockton-on-Tees; HAWKES, A. R., Doncaster; HUNTER, A., Maryport; KADDU, A. M., Bristol; MACPHERSON, I. G., Ardersier; MOORE, P. S. R., Oldham; PRYDE, G., Edinburgh; READDIE, Vera M., Newcastle-on-Tyne; RUSSELL, Mary McD. K., Jedburgh; SADIQ, J. H., Dundee; SPENCE, Janet L., Edinburgh; VASSALLI, Phyllis M., Egremont; WILLS, Jean, Bedale.

THE following candidates satisfied the examiners in the Intermediate Examination held by the Pharmaceutical Society in England and Wales in December 1957:—

ADDISON, P., Liverpool; ANSON, J. W., Stafford; ASHELFORD, E. J. M., Southampton; BLACK, D. H., Altrincham; BOWMAN, Dorothy C., Plymouth; BRENNAN, T. P., Widnes; BRIERLEY, A. A., Oldham; BRUCE, J. C., Darlaston; BUSH, Sheila M., Andover; CAMPBELL, B., Birkenhead; CANNING, A. P., Brackley; CRANMER, A., Eastleigh; CROSSICK, P. S., Stamford Hill; DIGNAN, M. H., Southampton; EVANS, G. A. B., Abertillery; EVANS, H. W., Ffestiniog; FILIPKOWSKA, Zofia, Acton; GARNETT, Christine, Sowerby Bridge; GIBBS, J. F., Bexhill-on-Sea; HAIGH, B. S., Wakefield; HART, R. L., Hampstead; HOLLIDAY, D. A., Ramsgate; HOLLOWAY, Jean C., Shoreham-by-Sea; HUNT, F. J., Crewkerne; LACEY, D. A., Burton-on-Trent; LAKE, A. G., Forest Hill; LOMAS, P. N., Oldham; MABBS, W., Cardiff; MARCUS, M. E., Kenton; MODEN, Patricia D., Bristol; MONGER, Marjorie A., Worcester; MOXON, Janet, Stoke-on-Trent; NEAVE, M. W., Sevenoaks; NELSON, Jean M., Wolverhampton; PACKHAM, Frances M., Bournemouth; PARKES, R. L., Pinner; PHILLIPS, Anne, Cardiff; REYNOLDS, M. A., Newport; RISSBROOK, Diana M., Willenhall; ROBERTS, J. N., Flint; SEDGLEY, E. M., Kibworth; STEPHENS, I. R. L., Brighton; THOMAS, D. J., Rochester; TOPPING, Audrey V., Birkenhead; WALKER, D. A., Grappenhall; WALKER, R. C., Dovercourt; WALTER, D. H., Bristol; WHITEMAN, Judith A., Birkenhead; WILKINSON, J. M., Leicester; WILLIAMS, P. J. B., Oswestry; WILLIAMSON, A. J., Newchurch-in-Rossendale; WILLIAMSON, I., Manchester.

Royal Society

BURSARIES SCHEME AWARDS

AMONG recipients of awards recently announced under the Royal Society and Nuffield Foundation Commonwealth Bursaries Scheme are Colonel S. S. Bhatnagar (department of microbiology, St. Xavier's College, Bombay), to enable him to study the latest chemical procedures with a view to applying them to characterisation of plant principles (at Cambridge in April and May); Dr. A. J. Buller (senior lecturer in physiology, St. Thomas's Hospital Medical School, London), to enable him to gain practical experience in studying the nervous system by the microelectrode technique (at Canberra, for about ten months from March); Mr. J. Dainty (reader in biophysics, Edinburgh University), to enable him to carry out research on the ionic relations of plant cells and the electrical properties of plant cell membranes (at Sydney, March to September); Dr. W. P. U. Jackson (department of medicine, Capetown University), to enable him to study certain specific methods and techniques in endocrine research (prediabetes, plasma insulin activity, calcium and phosphate metabolism) (in London, Cambridge and Louvain) June to August.

Radioactive Isotopes

LECTURES ON THEIR USE IN PHARMACY

APPLICATIONS are still being accepted for a course of eight lectures for pharmacists on "Radioactive Isotopes in Pharmacy and Medicine" at the School of Pharmacy, Leicester College of Technology (see *C. & D.*, December 14, 1957, p. 650). The lectures are at 7.30 p.m. on Wednesday evenings, commencing January 22. The following topics are included:—Radioactivity and its measurement; biological effects of radiation; protection against radiation hazards; production of radioactive isotopes and labelled compounds; applications of radioactive isotopes in medical diagnosis and radiotherapy; cold sterilisation and other pharmaceutical applications. On each occasion a summary of the lecture will be available. Later a further course, including practical work, is being provided for pharmacists who would like more specialised knowledge. The fee for the first course is £1 1s.

Hospital Costing Returns

TABULATED SUMMARIES PUBLISHED

A PUBLICATION recently issued by H.M. Stationery Office (price 22s. 6d.) provides 135 pages of tables and data relating to the average cost of maintaining a patient in hospital for one week. The teaching hospitals are separately shown, and all hospitals are classified so as to provide comparisons. The tables show that drugs and dressings represent but a small part of the total cost, the average for all acute hospitals in England and Wales being about one-fortieth of the average patient maintenance cost per week. The cost varies according to hospital type, reaching about one-fifteenth of the average cost for a tuberculosis patient. In London teaching hospitals, acute, the drug cost is nearly one-thirty-fifth, whereas for provincial teaching hospitals it is approximately one-twenty-sixth of the total. The overall trend does, however, show an increase. Total maintenance cost over recent years continues to rise.

Silicones from France

FIRST ANTI-DUMPING ORDER

THE Board of Trade has had under investigation an application made by the United Kingdom manufacturers of silicones for the imposition of an anti-dumping duty on polymethylsiloxane fluids and emulsions (commonly known as silicone fluids and emulsions) imported from France. After examination the Board is "satisfied that dumping has been taking place and, in the case of fluids, is still continuing, and that such dumping is causing material injury to a United Kingdom industry." An order, the Anti-Dumping No. 1 Order, 1958, has therefore been made imposing from January 7 an anti-dumping duty of 4s. per lb. on polymethylsiloxane fluids originating in France and manufactured by *Société des Usines Chemiques Rhone-Poulenc* in order to offset the dumping of those goods in the United Kingdom.

Salk Vaccine on the Air

PUBLICITY FOR CANADIAN MATERIAL

WIDE radio and television publicity was given to the arrival and distribution of the Canadian Salk vaccine (see *C. & D.*, January 11, p. 29). Interviews and documentary films were featured by both B.B.C. and Commercial Television. On the evening of January 4, Dr. F. S. Gorrill (deputy managing director, Evans Medical Supplies, Ltd.) was interviewed on the subject of the vaccine on the B.B.C. Home and Light programmes. On January 7 he was interviewed on the B.B.C. television service from Manchester. On January 8 B.B.C. television broadcast a documentary film of the dispatch of the vaccine from the company's headquarters, including an interview with two parents whose children are to be vaccinated.

Research on Cod Oil

POSSIBLE NEW DRUG AGAINST T.B.

A CONCENTRATE of unsaponifiable material obtained from cod-liver oil by a process worked out in the Hull laboratories of British Cod Liver Oils, Ltd., was sent on January 10 to the Dutch Government's Nutrition Research centre, Utrecht, Holland. The concentrate is believed to contain one of the world's most powerful anti-tuberculosis drugs. The intention is to break it down still further in Holland, using a research team under Dr. C. Engel. The substance that is understood to have proved so potent against the tubercle bacillus is believed to be contained in only one fraction of the oil—the glyceryl ethers—representing about 1/2,500th part of the pure oil.

Deaths from Influenza

RISE SUGGESTS RETURN OF "ASIAN"

DEATHS from influenza in the 160 great towns of England and Wales in the week ending January 4 seem to confirm that there is a second outbreak of Asian 'flu. They rose to 143 from eighty-nine the previous week, against fifteen in the corresponding period of 1957 and a peak of 607 deaths in the week ended October 19, 1957.

NEWS IN BRIEF

THE next biennial congress of the International Chamber of Commerce is being held in Washington, D.C., U.S.A., from April 18 to 24, 1959.

A STAPHYLOCOCCAL infection resistant to antibiotics has caused the closure of wards in hospitals at Liverpool, Lancs, and Hitchin, Herts.

THE Common Cold Research Unit, Harvard Hospital, Salisbury, is appealing for volunteers, particularly to fill the next two sessions, which began on January 14.

CAPSULES, fancy goods and toilet articles were among the goods stolen by thieves who broke into the Stanley Road, Bootle, Lancs, branch of Boots, Ltd., on January 5.

IN November 1957 there were 2,000 fewer persons employed in the chemical industry and allied trades than in the previous month. At 531,000, however, the figure was still 1,000 more than for the corresponding period of 1956.

IN a series of television programmes to be broadcast on Tuesday evenings from February 11, the British Broadcasting Corporation is showing viewers the treatments given and research work carried on at ten provincial, Scottish, and Welsh hospitals.

A £200 CHEQUE (proceeds of a recent supper and dance) sent to the Benevolent Fund of the Pharmaceutical Society by Liverpool Chemists' Association and Branch, probably represents, states Mr. Denver L. Rees (Association secretary), the largest amount ever sent to the fund as the result of a single function.

THE Acute Rheumatism (Amendment) Regulations, 1958, which came into operation on January 14, extend indefinitely the period of operation of the Acute Rheumatism Regulations, 1953, which require the notification of cases of acute rheumatism in persons under sixteen years of age in specified parts of England.

WEST SUSSEX Executive Council has requested a Chichester doctor to ensure that his prescriptions are written more plainly. When a complaint was received that only one bottle of Fenox drops had been supplied when four were prescribed, professional members of the Council, examining the prescription, found it impossible to decipher the directions regarding quantity.

AN Order (published as S.I., 1958, No. 16), effective since January 14, reduces from 8s. 9d. to 6s. 6d. per cwt., the rate of drawback allowable in respect of Customs duty paid on solid insoluble quebracho extract used in the manufacture of certain exported soluble quebracho extracts or blends of soluble quebracho extract with myrobalan extract.

FROM investigation of the characteristics of a considerable number of deaths that occurred during the influenza epidemic the Public Health Laboratory Service reaches the conclusion that in most of the victims staphylococcal infection was present in addition to the influenza virus. Deaths probably took place so quickly that treatment would be unlikely to have had any chance.

TOPICAL REFLECTIONS

By Xrayser

Changed Conditions

The news (p. 31) that there was only one death from whooping-cough in London during 1957 reveals great medical progress. Just what is meant by "London" I do not know, but it may mean a population of eight millions. I recently came across a table (or "bill of mortality") for the city of Glasgow for the year 1838, the population of which was estimated to be at that time 263,000. Whooping-cough in the year dealt with accounted for no fewer than 400 deaths, of which 372 were at an age under five. Figures for measles and smallpox were similar, amounting to 405 and 388 respectively. Smallpox, rarely absent, was being gradually reduced by Jenner's vaccination, but what was most feared was the appearance of whooping-cough during a smallpox epidemic. For many years living conditions were so bad that smallpox in epidemic form continued to take a heavy toll of life, despite the work of Jenner. Determined effort by public health authorities, aided by the discoveries of science, have produced dramatic changes in such diseases as smallpox, whooping-cough, diphtheria, cholera and tuberculosis. It is noteworthy that the decline in deaths in children from smallpox in the early nineteenth century was accompanied by a corresponding rise in deaths from measles, and the opinion was widely held that there was little to be gained by reducing one if the other was to be equally destructive.

A Matter of Opinion

The meeting convened by the Dartford branch of the Pharmaceutical Society for the purposing of discussing pharmaceutical education was productive of a fairly representative cross-section of the views held in the country as a whole, as reports of other discussions have shown in recent times. The fear expressed by Mr. A. Howells to the effect that the higher the standard of qualification, the more danger there is of dilution (by giving recognition and responsibility to a lower standard set by the Government itself) is understandable, but in my opinion groundless. It will be a long time before we reach the stage at which there is a deficiency of pharmaceutical man-power for pharmaceutical duties—on the retail side at least. Mr. Howells's concern that the introduction, in March 1958, of the extended academic course might result in large numbers of students preferring the degree to the diploma is a different matter. That is the inevitable result of the Society's educational policy, and, as Mr. Earles pointed out, it is the goal towards which they have been working since the publication of the report of the committee of inquiry in 1941. It may appear strange at first sight that the Society should go to so much trouble to reform the diploma course and syllabus if the intention is to see degree admission to the register "the rule rather than the exception," but not all universities are ready to add pharmacy to the courses offered. It must be expected that, where a degree is available in an educational centre, the student will take the degree. In fact, it will surprise me if he has any option in the matter, for such centres seem unlikely to offer two courses. I notice that Mr. J. R. Watson said that, if pharmacy was to continue along its present lines, with medicaments handed out as received from the manufacturers, and less extemporaneous dispensing, no advanced diplomas were necessary. That, as I have written before, is a dangerous fallacy. It is adequate knowledge of the medicaments dispensed that gives the pharmacist his authority and his recognition.

A Doubtful Beverage

I am indebted to the correspondents who so readily replied to my request for information on the subject of Indian brandy. It appears to have a wide geographical demand though, so far, there is no indication of its sale in Wales or Scotland. From the formulas stated, it is evident that tincture of rhubarb is one of the principal ingredients, and, as implied by one of your correspondents, its presence is likely to have a deterrent effect on the popularity of the preparation as a beverage.

IRISH NEWS

THE NORTH

Ulster Chemists

MONTHLY MEETING OF EXECUTIVE

AT the monthly meeting of the executive committee of Ulster Chemists' Association held in Belfast on January 7, Mr. J. A. Brown (vice-president) was in the chair in the absence of Mr. A. Templeton (president) who was ill. The secretary was instructed to write to Mr. Templeton, conveying the best wishes of the meeting for his speedy recovery. The chairman spoke with regret of the death of Mr. John McGregor who had been president of the Association in 1936 and had been a trustee for many years (see *C. & D.*, December 21, 1957, p. 663). The committee observed a brief silence. The minutes of the December meeting were adopted on the motion of Mr. T. A. Gibson, seconded by Mr. J. C. Wellwood. The secretary read a letter from Mr. W. S. Hall in which he asked the committee to accept his resignation. Because of extra commitments, he would be unable to attend so many meetings as he would wish. The committee accepted his resignation with regret and placed on record sincere appreciation of Mr. Hall's services to the Association. The secretary reported on a subcommittee meeting on the preparation of a new price list. It was agreed that a new list should be compiled but that in future it should be published every third year instead of every second year. The format would be altered to a smaller, broader book with double columns of goods listed, which would allow for easier reference. Mr. C. L. Gordon-Rattie reported on further investigations by the subcommittee into profit margins, and the secretary was instructed to write to various firms drawing attention to inadequate profit margins on their products, and also to the marketing policy committee of the National Pharmaceutical Union. Concern was expressed at the growing tendency of some manufacturers to increase wholesale prices while leaving retail prices unchanged. That was deemed unfair and the "thin edge of the wedge" in an attempt to cut profits to the chemist. Consideration of a member's request for the introduction of a general Saturday half-holiday was deferred until the next meeting. Mr. H. G. Campbell and Mr. H. W. Gamble were elected trustees of the Association. Mr. J. G. Blair (successor to Mr. R. Cleland, Sandy Row, Belfast) was elected to membership, and a number of Associates, whose applications had been approved at a previous meeting of the committee of the Associates' section were elected to associateship.

Also present were Misses C. B. Abernethy, C. E. Culbert, Messrs. J. C. Acheson, H. S. Anderson, W. H. Boyd, H. G. Campbell, R. Gibson, W. J. Moffett, M. C. Mooney, R. A. McEwen, A. Steede. Apologies for absence were received from Messrs. J. Caldwell, H. W. Gamble, W. L. McDonnell, W. R. McNabb, C. A. Quinn, and W. J. Rankin (treasurer).

THE REPUBLIC

Photographic Dealers

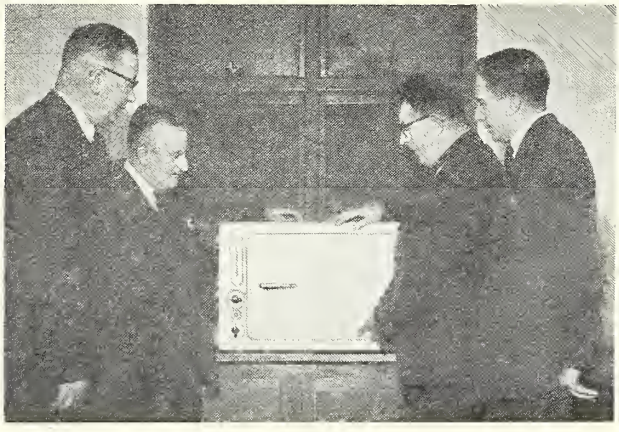
COLOUR FEATURED AT DUBLIN SHOW

THE emphasis was on colour photography at the recent exhibition held in Dublin by the Irish Branch of the Photographic Dealers' Association. In many ways the show was the most successful yet organised by the Branch. Another outstanding aspect of the display was the showing for the first time in Dublin of sound-synchronised 8-mm. cine cameras, and several new 16-mm. sound projectors. An interesting visitor to the exhibition was Mr. Randall Cox, Cardiff (vice-president of the P.D.A.). The lord mayor of Dublin (Councillor J. Carroll) formally opened the exhibition at a function over which Mr. F. Roche, M.P.S.I. (Branch chairman), presided. Among those exhibiting were Kodak, Ltd.; Ilford, Ltd.; P. C. Cahill & Co., Ltd. (Zeiss Ikon); Gevaert (Eire), Ltd.; Slattery, Allan & Co., Ltd. (Johnsons of Hendon products); Atlas Cine Supply Co.; Sight & Sound Equipments, Ltd. (Agfa products); Lyall Smith (Aldis projectors); Cinex, Ltd.; and Philips Electrical, Ltd.

New Chemical Factory

DUTCH FIRM'S SLIGO VENTURE

A CHEMICALS factory is being built in Sligo. The sponsors are W. J. L. Vanderlands Koninklijke Industrieele Maatschappij, Holland — one of the largest chemical manufacturers on the Continent, operating two factories in Holland and one in France. The firm has completed negotiations for the acquisition of a site on which to build the factory, and the Irish Government is granting £150,000 towards the cost of building. Initially the new factory is expected to provide employment for approximately sixty local people.



PRESENTATION TO COLLEGE OF PHARMACY IN DUBLIN: Mr. D. W. P. Boyd (a director of Boileau & Boyd, Ltd., wholesale chemists, Dublin) presents an electric steriliser to the College of Pharmacy as part of the College equipment. The president of the Pharmaceutical Society of Ireland (Mr. Maurice Power) receives it from him. Also in the picture are Mr. H. P. Corrigan (vice-president), and Dr. Richard Timoney (dean of the College).

IRISH BREVITIES

THE NORTH

A PHARMACY ball is being held by the Society of Pharmaceutical Students at Belfast Castle on January 24.

CHAIRMAN of the committee set up by the Northern Ireland Hospitals Authority to investigate and advise on hospital pharmacy problems (see *C. & D.*, January 4, p. 4) is Mr. A. Templeton, M.P.S.N.I.

BRANCH MEETINGS

WESTERN [LONDON]

£.s.d. of N.H.S.

THE Western Pharmacists' Association held a joint meeting in January with the National Pharmaceutical Union Branch to hear news of "The £ s. d. of N.H.S." from Mr. J. Wright (deputy secretary, N.P.U.) Points of interest from his talk and answers to questions included the following: that not less than 1 gr. of any drug would now be paid for as had occurred with several drugs used in eye drops in the British National Formulary; that 87 per cent. replies were received to a recent Drug Tariff inquiry; that if an item was in the Drug Tariff no claims could be made for broken bulk or out-of-pocket expenses; that the N.P.U. would firmly resist any return to the bottle deposit; and that disallowed prescriptions for appliances should always be returned to the contractor.

HARROGATE

90 Per Cent. Pass Level?

A CONSERVATIVE estimate of a 90 per cent. success in the final examinations was assured by the new educational policy which comes into force in March, said MISS M. A. BURR (a member of the Pharmaceutical Society's Council) when she addressed members of the Harrogate Branch of the Pharmaceutical Society on January 9. The syllabus revision subcommittee, which had co-opted many eminent school teachers, had formulated a new method of entry into pharmacy, she said, making it now possible for students with three subjects at G.C.E. advanced level to enter at one intermediate stage. That new proposal had been well received by school teachers and should increase the number of students. In reply to questions, Miss Burr said that it was intended to incorporate in the third year of study a "practice of pharmacy" course which would teach the practical relationship between employer and employee amongst other things. In reply to a charge that the pharmaceutical publications were neglected by the British Medical Association Miss Burr said that a very efficient liaison committee existed between the two bodies and that at the B.M.A. Conference there had been an exhibit of pharmaceutical publications.

NEW OFFICERS FOR THE P.A.T.A.

Retail section's turn to provide president

THE council of the Proprietary Articles Trade Association met in London on January 9, the president (Mr. L. D. Smith) in the chair. THE PRESIDENT welcomed Mr. J. S. Walmsley (nominated by E. R. Squibb & Sons, Ltd.) as a representative on the manufacturers' section.

Restrictive Trade Practices

The council received reports upon approaches made to price-cutters at the request, and with the authority, of manufacturer members, figures of letters written, and information on the results achieved in certain cases. It was agreed to remit to the Association's advisers for elucidation points that arose during the discussion.

The council decided it could regard as satisfactory the reactions of members of all Sections to the revised subscription rates operative from January 1 (see *C. & D.*, October 26, 1957, p. 452).

Election of President

The retail section having the privilege of nominating the *President* for 1958, MR. C. H. FOSTER, on behalf of the section, proposed Mr. H. G. Moss for the office. During the previous three years Mr. Moss, he said, had been chairman of the section, and his colleagues had had ample time to assess his qualities, which were indeed so well known as to need no further reference. MR. N. C. JEFFERY, for the manufacturers' section, expressed admiration for Mr. Moss's pertinacity and singlemindedness and the motion, supported by MR. J. F. BOUCHER (wholesale section), was carried with acclamation.

Mr. Moss was then invested by Mr. Smith with the president's badge of office (see p. 55). Acknowledging the honour paid him by the council MR. MOSS said that his immediate predecessors had taken office at a time when there were clouds on the Association's horizon. Mr. Smith had taken over a newly-organised Association and had successfully nurtured it during its first formative year. Mr. Moss then moved that the thanks of the Council should be accorded to Mr. Smith as outgoing president. During his year of office, he said, Mr. Smith had shown ability, tact and patience to a high degree.

THE OUTGOING PRESIDENT thanked the Council for the co-operation he had received at all times. It was of outstanding importance that, since the system of enforcing price maintenance had been changed and the responsibility for enforcing their fixed prices had fallen on individual manufacturers, there appeared to be no sign of an increase in price cutting. Some manufacturers had already made use of the remedy provided for them under Section 25 of the Restrictive Trade Practices Act, and he had no doubt that, at the appropriate time, others would follow suit. It seemed significant that, at the end of the year, membership of the manufacturers' section (undoubtedy the most important section of the Association and one that had an important rôle to play) had shown a noticeable increase. It could be said with confidence that the status of the P.A.T.A. had been well maintained. Its influence had become recognised in the United States and Canada through the recent visit of Mr. H. E. Chapman (P.A.T.A. general secretary), to whom, and to whose staff, Mr. Smith expressed the Council's thanks.

The following officers were also elected:—*Vice-presidents:* Messrs. N. C. Jeffery (manufacturers'), J. F. Boucher (wholesale) and C. H. Foster (retail). *Treasurer:* Mr. R. G. Dyas. *Executive Committee:* Messrs. W. B. Alexander, N. Dewey, T. Marns and H. G. Middleton (manufacturers'); W. A. Allen, N. E. Foster, P. J. Lushington and H. G. T. Read (wholesale); J. E. Goodall, D. A. Rees, G. H. Walker and J. F. Watts (retail), with the president, immediate past-president, vice-presidents and treasurer *ex officio*.

The Council authorised arrangements for publishing the 1958 Year Book and List of Proprietary Articles, probably in early July.

Luncheon Guests

At a luncheon which preceded the council meeting Sir Hildreth Glyn-Jones (Mr. Justice Glyn-Jones) and Dr. T. H. M. Kerfoot (president, Association of British Pharmaceutical Industry) were personal guests of the president, who coupled their names with the toast. In his response SIR HILDRETH spoke of his pleasure at attending the luncheon under the chairmanship of Mr. L. D. Smith, son of an old friend of himself and his father: Mr. F. J. Smith—"a true and loyal friend, for whose kindness there are many in the drug trade today who have reason to be thankful."

DR. KERFOOT brought the fraternal greetings of his Association. "If titles are anything to go by, it would seem that we represent industry, while you represent trade." Probably never before had the work of professional and trade associations been of greater importance. "In this context, you in the P.A.T.A. have had to face a position of considerable difficulty in connection with the Restrictive Trade Practices Act, and I take this opportunity of paying you, on behalf of the A.B.P.I., a sincere tribute for the skill with which you have handled this difficult matter and the part you have played in preserving the liberty of the individual . . . I believe," said Dr. Kerfoot in conclusion, "that if all trade and professional bodies concerned with pharmacy continue to work closely together, then—and only then—we can ensure that the whole of our work continues to be for the public benefit."

CHEMICAL INDUSTRY IN EUROPE

Economic Co-operation Organisation's survey

EUROPEAN chemical production increased by 8 per cent. in 1956, a slightly lower rate than the increase in 1955 over 1954 (11·5 per cent.). There is, however, every indication that the slower trend in expansion has been reversed, temporarily at least, for production in the first half of 1957 was 13 per cent. higher than in the first six months of 1956. The countries belonging to the European Economic Community account for one-third of intra-European trade in chemicals, and over 50 per cent. of O.E.E.C. countries' trade with non-member countries. Those are some of the conclusions reached in a study of the *Chemical Industry in Europe* published by the Organisation recently (price 18s.).

The general trend towards the slowing down in the rate of economic expansion has naturally affected the chemical industry, but it has still continued to increase its relative importance over those of other industries. Within the chemical industry the largest increase in production took place in pharmaceuticals, synthetic detergents, plastic materials and nitrogen. Soap production was 4 per cent. higher and synthetic detergents 14 per cent. higher than in the previous year. Similar statistics for medicinal and pharmaceutical products are not available for all member countries, nevertheless, the report states that existing information on production in that sector indicates that the rate of increase was greater in 1956 than that for chemical production in general. Comparing the performance of the European chemical industry with that of the United States the report mentions that the United States' industry increased by 6 per cent. in 1956 over 1955 and 4·5 per cent. in the first half of 1957 compared with the corresponding period of 1956.

Supply and demand for chemicals were in balance on European markets in 1956 and the ratio of imports from third countries to production had not increased. During the period covered by the report, the demand situation permitted the chemical industry to increase prices where those increases could not be absorbed by higher productivity but pressure on prices was not generated by demand, says the report. Imports of chemicals from and exports to non-member countries rose in 1956 rather less than production. In contrast the United States exports of chemical products increased twice as fast as production in 1956.

The United Kingdom was the third largest importer of medicinal and pharmaceutical goods in Europe during 1956, the value being £7·6 millions against Belgium's £8·9 millions and Italy's £9 millions. In exports of the same goods the U.K. topped the list with a total of £38·6 millions or about one-third of the total medicinal and pharmaceutical exports from European countries. (Figures are based on the Standard International Trade Classification, group 551.)

The report concludes that the increasing world demand for chemicals and the launching every year of new products on the market creating a further demand, seem to ensure a relatively high rate of expansion for the chemical industry provided there is no fundamental change in economic and political conditions.

LEGAL REPORTS

Diabetic Too Long Without Food

AT Salford, Lancs, on January 3, a diabetic vanman pleaded guilty to driving while under the influence of a drug —insulin—to such an extent as to be incapable of having proper control of his vehicle. He was fined £20, with £3 3s. costs, and disqualified from driving for a year. The man was Robert Henshall, Derbyshire Lane West, Stretford. The court was told that a motorist saw Henshall's van hit a stationary car and afterwards drive " most erratically, swerving from side to side of the road." Henshall had had an injection of insulin at 7.30 a.m. and should have had a meal at noon; failure to do so had produced a state of hyperglycæmia.

Barbiturates Obtained Illegally

AT Glasgow sheriff court on January 6, Janet O'Donnell was fined £10 for illegally obtaining drugs through the National Health Service. An agent said on her behalf that she got Drinamyl tablets for her husband who had a nervous condition. O'Donnell herself was not a drug addict, he added. She admitted pretending to the doctors between June 28 and October 14, 1957, that she normally lived at Moncrieff House, Bridge of Earn, Perthshire, and that she was on holiday in Glasgow. The charge stated that she said she was a patient of a Perth doctor and that he had been prescribing tablets for her regularly. She induced the doctors to give her National Health Service prescriptions for 618 tablets.

Alleged Copyright Infringement

MR. Justice Danckwerts in the Chancery Division on January 14 had before him a motion by Bayer Products, Ltd., to restrain West Pharmaceutical Co., Ltd., Cavendish Square, London, W.1, from infringing their copyright in a pamphlet entitled " Pain " and referring to a drug sold by plaintiffs under the trade mark Panadol by reproducing the pamphlet or any substantial part of it or by distributing for the purposes of trade or to such an extent as to affect prejudicially the owner of the copyright by any such reproduction. Mr. F. E. Skone James, for Bayer Products, Ltd., said the defendants had agreed to give an undertaking in the terms of the notice of motion, with slight modification, pending the trial of the action. Mr. M. Finer, for defendants: I give such undertaking.

COMPANY NEWS

Last year's figures in parentheses

AYRTON, SAUNDERS & CO., LTD.—Mr. N. D. H. Shipley, M.P.S., has been appointed to the board.

THOMAS MORSON & SON, LTD. —Mr. A. S. Jerwood has joined the board as financial director. He retains his appointment as secretary to the company.

PFIZER, LTD.—Mr. J. A. Rodgers has resigned his position as general manager but will remain a director of the company in a consultative capacity.

MURPHY CHEMICAL CO., LTD. —Mr. J. S. Mitchell (managing director) is to retire on January 19. The vacancy will be filled by the appointment of Messrs. F. J. Samwell and G. L. Hey as joint managing directors.

MILTON ANTISEPTIC, LTD.—A dividend of 18 per cent. on Ordinary capital for the year ended September 30, 1957 (against 13½ per cent.) is proposed. Group profits, before tax, amount to £124,130 (£109,045); net profit, after tax, £58,390 (£52,205).

JOHNSON & JOHNSON (GT. BRITAIN), LTD. — Mr. John K. McPhie (general sales manager of the company for the past five years) was appointed to the board as sales and marketing director as from January 1.

Mr. J. K. McPhie

A. J. MILLAR & CO., LTD., Dublin. — Profit for year ended October 31, 1957, after all charges was £16,885. Ordinary dividend, 10 per cent. plus bonus of 4 per cent., less tax.

DRESSINGS MERGER

Third company may join

MERGER arrangements between Smith & Nephew Associated Companies, Ltd., and Southalls (Birmingham), Ltd. (*C. & D.*, January 4, p. 7), may be widened to take in Arthur Berton, Ltd. Terms have been agreed by the boards of the three companies and will be recommended to the members. It is proposed to offer 15 Smith & Nephew Ordinary shares of 4s. with a present total market value of about 120s. for each seven 5s. Ordinary of Arthur Berton, worth about 115s. 6d. at a recently quoted price of 16s. 6d. Holders of Arthur Berton £1 8 per cent. Preference shares will be paid out in cash at £1 a share. The intention of Smith & Nephew to pay at least 12½ per cent. for the year to December 31, 1957, will apply also to the new shares to be issued.

New Companies

P.C. = Private Company; R.O. = Registered Office

BELLAS SIMPSON, LTD. (P.C.).— Capital £1,000. To carry on the business of manufacturing and dispensing chemists, etc. Directors: George B. Simpson, M.P.S. (director of Aldington & Simpson, Ltd.), Florence M. Simpson, Keith B. Simpson, F.P.S., and Brenda W. Simpson. R.O.: 34 Portland Drive, Merstham Estate, Reigate, Surrey.

ROBERT McMULLAN, LTD. (P.C.).—Registered in Belfast. Capital £2,000. To acquire the business of a pharmaceutical chemist formerly carried on by the late Robert McMullan at 151 Lisburn Road, Belfast, etc. Directors: Mrs. Kathleen I. McMullan, Hugh C. McMullan and James M. M. Thompson. R.O.: 151 Lisburn Road, Belfast.

T. SISTERSON, LTD. (P.C.). — Capital £1,000. To carry on the business of consulting, analytical, manufacturing and general chemists, herbalists, seedsmen, etc. Directors: Thomas Sisterson, M.P.S., and David R. Smith, M.P.S. R.O.: 90 High Street, Felling, Gateshead.

JOHN CHAYTOR (CHEMISTS), LTD. (P.C.).—Capital £5,000. To acquire the business of a pharmacist carried on by John Innes-Chaytor, M.P.S., at Coventry, etc. Directors: John Innes-Claytor and Doreen B. Innes-Chaytor. R.O.: 6 Hall Green Road, Coventry.

BUSINESS CHANGES

THE Manchester office of the Washington Chemical Co., Ltd., is now at 220 Corn Exchange Buildings, Cathedral Street (telephone: Blackfriars 4401).

MR. D. VAUGHAN JONES, M.P.S., is transferring his pharmacy to 150 Loughborough Road, London, S.W.9 (from 193 Brixton Road) on January 30.

THE business carried on by the representatives of the late J. Thomas, M.P.S., 6 Penrallt Street, Machynlleth, Montgomeryshire (which had been in the family since 1796), has been acquired by Mr. D. G. Thomas, M.P.S., Machynlleth.

Appointments

THOMAS KERFOOT & CO., LTD., Vale of Bardsley, Ashton-under-Lyne, have appointed Mr. Bruce MacBenn to their medical detail staff.

G. B. KENT & SONS, LTD., 24 Old Bond Street, London, W.1, have appointed Mr. W. T. Goodsir general sales manager for the United Kingdom of their three divisions. Mr. A. W. Larkin is appointed sales manager for the U.K. of their toilet brushware division.

BURROUGHS WELLCOME & CO. announce that Mr. A. W. Lewis, M.P.S. (marketing manager), has accepted an appointment as sales manager of Burroughs Wellcome & Co (Australia), Ltd. Mr. Lewis is leaving for Australia at the end of January. Mr. G. S. Billenness, F.P.S. (assistant publicity manager) has been appointed marketing manager in succession to Mr. Lewis and Mr. H. B. Lomas, M.P.S. (manager of the sales department (veterinary)) has been appointed general sales manager (veterinary division).

OVERSEAS VISITS

MR. D. R. THOMPSON, F.P.S., D.B.A. (export department, CIBA Laboratories, Ltd.), left by air on January 9 for a four-month tour of the West Indies, Bermuda and the Bahamas.

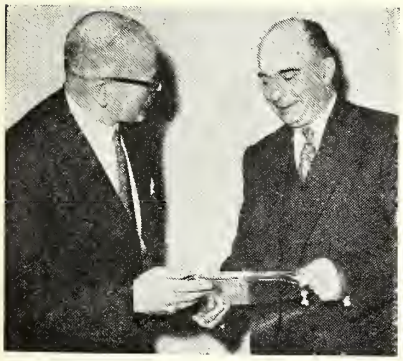
THREE executives of the Roussel Group of companies are flying from London and Paris in February to inaugurate the new offices of Roussel Pharmaceuticals (Pty), Ltd., Caltex House, Sydney, Australia. Mr. J. C. Roussel (chairman of the group) who leads the party, will be accompanied by Mr. J. Machizaud and Dr. A. Gremeaux.

PERSONALITIES

MR. C. BANNISTER, M.P.S., Fulham Road, Chelsea, London, S.W.10, a member of Serpentine Swimming Club, has formed the Serpentine Lido Lifeguard Club. The Lifeguard Club is to join regular lifesavers who watch over bathers, sometimes 18,000 daily, at the Serpentine Lido in summer.

MR. N. D. H. SHIPLEY, M.P.S., who has been appointed to the board of Ayrton, Saunders & Co., Ltd. (see p. 60), qualified at the Liverpool School of Pharmacy in 1937 and afterwards was in retail pharmacy until joining the Forces in 1940. He joined Messrs. Ayrton, Saunders in 1947 as manager of the drug sales department. For a period Mr. Shipley moved to the company's drug manufacturing department—then, in 1955, became manager of their export department.

MR. HAROLD MOSS, M.P.S., who was elected President of the Proprietary Articles Trade Association at the Council meeting on January 9, is a well-known personality in pharmacy. He has been a member of the retail section of the Council since January 1949, and of its Executive committee since 1953. Two years later he was elected a vice-president of the Association and chairman of the retail section. Mr. Moss is the son of Mr. E. Moss, M.P.S., who developed the retail pharmaceutical business centred at Feltham, Middlesex, which, as the private limited company of E. Moss, Ltd., now controls thirty branch pharmacies. Mr. Harold Moss had his academic training at Chelsea Polytechnic, qualifying in 1928 and, in 1929, took over the management of his father's Southall branch. In 1934 the family business was converted into a private company, with Mr. Harold Moss as managing director—a position he still holds. For many years past Mr. Moss has taken an active part in pharmaceutical public life. He has been a member of Middlesex Pharmaceutical Committee since 1944 and was its chairman from 1953 to 1955. He was elected to the National Pharmaceutical Union executive in 1950 and was elected vice-chairman in 1957. He serves on the Central N.H.S. Committee and on the Joint Industrial Council for Pharmacy. Prominent also in pharmaceutical Branch matters, Mr. Moss is past chairman of the Thames Valley Pharmacists' Association and of the Hounslow Branch of the N.P.U. He has worked hard to promote and safeguard the system of price-maintenance which he recognises as essential to the well-being of retail pharmacy, and was one of the Council's representatives before the Monopolies Commission in 1954. In 1952 he visited the United States as the sole pharmacist member of the productivity team on retailing and his published report on his impressions of that visit received wide publicity in the pharmaceutical press. A more recent visit was in the autumn of 1956, when he was the honoured guest of the National Association of Retail Druggists at the Cincinnati Convention and addressed its members on the subject of "Pharmacy and Fair Trade in Great Britain." By resolution of the Convention, Mr. Moss was elected both an honorary life member and an honorary past president of the N.A.R.D.



LONG-SERVICE AWARD: Mr. F. Taylor (a representative of Dalmas, Ltd., Junior Street, Leicester) receives a silver salver in recognition of his fifty years' service with the company. The salver was presented to him by his fellow representatives at a recent sales conference.

MARRIAGE

HOLLIDAY—BURROWS. — At St. Nicholas's Parish Church, Belfast, Northern Ireland, on December 26, 1957, Robin Eldred Holliday, B.Sc., M.P.S.N.I., 48 Marlborough Park South, Belfast, to Charlotte Elizabeth Burrows, N.F.F., L.T.S.C., 14 Ulsterville Gardens, Belfast.

DEATHS

ANDREWS. — On December 20, 1957, Mr. Wilfred Howard Andrews, M.P.S., 236 Farnham Road, Slough, Bucks, aged fifty-eight. For many years Mr. Andrews was manager of the pharmacy known as Hubert Rigden, Peterborough Road, Harrow, Middlesex. During the first world war Mr. Andrews was on active service and later spent a number of years in India. He was a member of the Circle of Friendship Lodge of Freemasons.

APLIN.—On January 6, Mrs. F. E. Aplin, wife of Mr. J. H. Aplin, M.P.S., Silver Street, Trowbridge, Wilts.

BAUGH. — Recently, Mrs. A. M. Baugh, High Street, Ongar, Essex, aged eighty-one. Mrs. Baugh was the widow of Mr. J. W. M. Baugh, F.P.S., who died just over a year ago. They celebrated their diamond wedding in 1955.

BRIGGS.—On January 8, Mr. Gilbert Briggs, M.P.S., 144 Halifax Road, Brierfield, Burnley, Lancs, aged seventy. Mr. Briggs was formerly in business in Railway Street, Brierfield, for over forty years.

ELLIOT. — On January 8, Colonel Walter Elliot, M.P., aged sixty-nine. Colonel Elliot was Minister of Health 1938–40 and served two terms as Parliamentary Under-Secretary for Health for Scotland in the 1920's. He was a Fellow of the Royal Society and a Fellow of the Royal College of Physicians.

FLEMING.—On December 30. 1957, Mr. Willie Fleming, M.P.S., 2 Linden Road, Newby, Scarborough, aged sixty-three.

GILLIATT.—On December 31, 1957, Miss Alice Gilliatt, F.P.S., 6 Stevenage Road, Fulham, London, S.W.6, aged seventy-seven. Miss Gilliatt was a founder member and subsequently president of the Association of Women Pharmacists and served for many years on the committee of the Guild of Public Pharmacists. She retired from the post of chief pharmacist of the Western Hospital, Fulham, in 1943. Daughter of a Boston, Lincs, pharmacist, Miss Gilliatt led an active public life, and in 1934-35 was the first woman mayor of Fulham. In 1941 she was appointed a magistrate of the County of London. Her brother, the late Sir William Gilliatt, was surgeon-gynæcologist to the Queen at the time of his death in 1956.

KENDALL.—On December 27, 1957, Mr. Ernest Henry Kendall, M.P.S., 28 Merchiston Road, Catford, London, S.E.6, aged eighty-one.

LONGMORE.—Recently, Mr. T. A. Longmore, a member of the medical sales division of Kodak, Ltd., for the past twenty-eight years was responsible for the medical sales laboratory at Kodak House, Kingsway, since 1946. He was well known for his keen and active interest in the Society of Radiographers and, over the years, he achieved every major distinction that the Society offered, culminating in his election to the presidency in 1954.

McROBERTS.—At his home, Abercorn Drive, Ballyclare, on December 30, 1957, Mr. Matthew McRoberts, M.P.S.N.I. Mr. McRoberts qualified in Dublin in 1920 and registered with the Pharmaceutical Society of Northern Ireland in 1926. He carried on a pharmaceutical business for many years at 13 Main Street, Ballyclare.

PRIOR. — On December 25, 1957, Mr. Ralph James Stafford Prior, M.P.S., 1 Manorway, Bush Hill Park, Enfield, Middlesex. Mr. Prior qualified in 1954.

ROBINSON.—Recently, Mr. Nathan William Robinson, M.P.S., 29 St. Leonard's Road, Oxford, aged fifty-one. Mr. Robinson was on the staff of Bellamys Dispensing Chemists, Ltd., Oxford, at a London Road branch. He was a staunch supporter of the Methodist Church being a society steward in it for four years.

ROLLETT. — At Southwold, recently, Mr. Harry Rollett, M.P.S., Wrentham, Beccles, Suffolk, aged eighty-nine. Mr. Rollett took up business in Wrentham in 1892, having come from Lincolnshire. He remained in Wrentham until his retirement, due to failing health, a few months ago. Throughout the years he always took an active part in the village's social events, was a keen churchman and served as churchwarden for fifty-six years.

SCOTT.—On January 6, Mr. Robert John Scott, M.P.S., 21B Barclay Place, Edinburgh, aged seventy-nine.

STUCKEY.—Recently, Mr. Arthur F. Stuckey, the Laurels, Watermore

Road, Frampton Cotterel, Bristol, aged fifty-three. Mr. Stuckey had represented Edward Taylor, Ltd., Manchester, for the past thirteen years in the South-west of England, and South Wales.

SYMONS.—On January 10, Mr. G. T. Symons, a representative of The British Drug Houses, Ltd., in the south-west London area for many years, aged eighty-three. Mr. Symons had been in failing health for some considerable period.

WILLIAMS.—On January 5, Mrs. Margaret Alice Williams, M.P.S., 491 Stratford Road, Sparkhill, Birmingham, 11, aged fifty-five. Mrs. Williams was secretary of R. A. Williams (Chemists), Ltd., and widow of the late Mr. Rees Aled Williams, who died in November 1957. She is survived by a pharmacist son.

EXAMINATION RESULTS

Successful Pharmaceutical Chemist candidates in England and Wales

THE following candidates have satisfied the examiners in the Pharmaceutical Chemist Qualifying examination held by the Pharmaceutical Society in England and Wales in December 1957. (†=Certificate withheld pending evidence of practical training or age):—

†Abbott, Shirley J., Orpington
†Alu, P. U., Leeds
†Andrews, A. C., Tooting
†Asher, A. D., Southsea
Austwick, Gillian, Bromsgrove
Bailey, Elizabeth C., Tipton
Bailey. M. J., Coalbrookdale
Baker, Mary J., Liverpool
†Baker, W. A., Manchester
†Barker, A. G., Leicester
Barker, Jean E., Derby
†Barter, Shirley A. G., Coleford
Bevan, M. E., Cardiff
†Biarska, Sylvia V. M., Wandsworth
†Bibby, Dorothy M., Doncaster
†Birtwistle, G. J., Blackburn
Bishop, D., Middlesbrough
Bough, Betty J., Leek
†Bowen, D. A., Tonbridge
†Bowman, Catherine L., Hexham
Bragg, Anne, Cardiff
†Braithwaite, J. R., Longtown
†Brierley. Jean, Oldham
†Brookes, J. J., Cheadle Hulme
†Brown, D. H., Skipton-in-Craven
Brown, P. G., Birkenhead
Buckley, T. C., Bristol
Casey, Maureen A., Manchester
Castle, S., Paddington
†Chadwick, N., Rochdale
Chaldecott, G. R., Dorchester
Chance, D. G., Dudley
Chapman, G. E., Cardiff
†Childs, Mary R., Cardiff
Clitherow, R., Liverpool
Clumpus, H. H., Southport
Cohen, D., Chester
Cooper, Sheila, Leicester
†Cope, J. I. W., Cuffley
Cross, I. J. H., South Benfleet
†Dabbs, H., Blackburn
Dade, J. D., Ringwood
Davidson, Irene W., Southampton
Davies, G. F. H., Ammanford
†Davies, Valerie M., Bristol
Davis, K. B. K., Paignton
†Dawson, R. W., Manchester
†Denney, Joan M., Lewes
Donlon, B. H., Warrington
†Duch, Z. J. K., Paddington
†Earp, Patricia J., Sutton Coldfield
†Eastwood, J. N., Worthing
†Edirimanasinghe, S. M., Bloomsbury
†Edwards, C. J., Upminster
Edwards, J. A., Cheadle Hulme
†Ellis., Shirley, Ossett
Etheridge, J. A., Gloucester
Etherington, L., Mansfield
Evans, A. J., Torquay
†Evans, J., St. Helens
†Farnsworth, Joan M., Derby
†Ferrigno, S., Liverpool
Fletcher, P., Birkenhead
†Forusz, S. L., Hove
†Francis, M., Kingston
†Frankel, S. S., Bermondsey
Free, K. H., Colchester
†Frogson, Marion, Rotherham
†Furber, T. H., Pontefract
†Furr, J. R., Swansea
†Giles, Patricia A., Wallasey
Gillott, Patricia M., Pontyclun
†Gilson, Gwendolen G., Bath
†Goalen, C., Stockport
†Godfrey, E., Willesden
†Goode, Lesley J., Hampton
†Gower, A. G., Brighton
†Gray, Diana E., Coundon
†Greenhill, J. V., Coventry
†Gregory, J. C., Finchley
Hale, N., Nottingham
Hale, S., Oldham
†Hall, Mary L., Pontypridd
†Halstead, P., Barnsley
†Hampson, Judith, Balham
†Harris, F. W., Birmingham
†Hart. H. J., Canvey Island
†Hartwell, Brenda J., Manchester
Heeley, Gillian A., Sutton Coldfield
†Hersey, J. A., Waltham Cross
Hibbard, D. M., Sheffield
†Hill, S. A., Hassocks
Hinchliffe, F. A., Oldham
†Holland, P., Chepstow
†Hollyman, Norah M., Cardiff
†Hope, T. B., Llandrindod Wells
†Howe, M. F., Hull
†Howden, Ann M., Leeds
†Howell, D. R., Barry
Hughes, Margaret E., Cardiff
Hughes, Ruth M., Manchester
Hunt, J. A., Sheffield
†Igweze, E. O., Westminster
Jackson, R., Leeds
†James, G. W. L., Swansea
James, P. D., Chesterfield
Jelliffe, Margaret E., Shirley
†Jenkins, Gwyneth M., Preston
†Jones, Margaret J., Westminster
Kirk, P. J., Stourport-on-Severn
†Knowles, R., Colne
†Lam, Dora, Paddington
Lander, Eileen M., Nottingham
Laycock, G. B., Huddersfield
Leach, R., Flint
Lemon, P. G., Loughborough
Libbish, I., Leeds
†Lister, Jennifer E., Paddington
†Lloyd, Mavis, Swansea
†Lowrie, Anne, Newton-on Ouse
†Lumby, Joyce M., New Eltham
†McCollan, H., Bradford
†McCormick, G. A., Oldham
†McKay, Alison F., Sheffield
†Maddison, Shirley, Doncaster
Maitland, D. L., Bolton
Marshall, Elaine M., Birmingham
Matthews, D. O., Sanderstead
†Matthews, E. K., Biggleswade
†Miller, Margaret J., Nottingham
†Morgan-Davies, Ceri, Cardiff
†Morgan, G. P., Cathays
Morris, J. B., Bournemouth
Morris, R. B., Liverpool
†Moss, M. W., Northampton
†Mowles, Stella K., Reading
Newbould, B. B., Sheffield
†Newham, Janice, Southend-on-Sea
†Newman, R. J., Ledbury
Nicklin, R. G., Coventry
Oldham, Hilda M., Liverpool
†Orme, K. G., Stockport
†Owne, Ceris, Bangor
†Parkinson, Joan M., Manchester
Parry, Sheila M. J. V., Stockport
†Paster, G., Cardiff
†Paternoster, D. J., Plymouth
†Peake, W. R., Manchester
Pickett, J. M., Henfield
Piliso, M. McP. L., Birmingham
†Pindar, Philippa J., New Malden
†Pollard, V. F., South Norwood
Potter, Mavis G. M., Eastbourne
†Price, Shirley A. P., Harrow
†Pride, Esther, Manchester
†Pye, Diana A., Edgware
Quinn, Shirley E., Cardiff
Randle, Sheila R., Wolverhampton
†Rayner, Judith E., Mirfield
Read, Pamela S., Smethwick
Reid, C. B., Barry
Rhodes, Audrey, Ulverston
Richmond, H., Prestwich
†Roberts, T. A., St. Austell
†Robinson, Margaret P., Birmingham
†Rock, D. A., Barnsley
†Ross, Sheena S., Lanarkshire
†Russell, A. D., Swansea
†Rutyna, Krystyna, West Kensington
Samuel, Esther E., Cardiff
†Samuel, Jean, Swansea
†Sanis, A. M., Bournemouth
†Saunders, J. B. C., Liskeard
†Saxelby, Pamela E., Castle Donington
†Scarpe, Barbara A., Ipswich
†Shackleton, J. B., Abergavenny
†Share, Sylvia B., Cowley
†Shashati, G., Leicester
†Shaw, C. V., Ashton-under-Lyne
†Shaw, Pauline M., Manchester
†Simmons, M., Upton Park
†Sindell, Barbara J., Harrow
†Smith, A. K., Winscombe
Smith, Edwina, Newcastle
†Smith, G. D., Bognor Regis
Smith, J. T., Newcastle-on-Tyne
†Smith, Susanne G., Birmingham
South, A. W. R., Mottingham
†Spencer, P. S. J., Leicester
Stephenson, Doris M., Manchester
Stankler, J. B., Leeds
Steane, Margaret A., Birmingham
†Stock, G., Leeds
Stockley, I. H., Evington
†Stoker, J. R., Manchester
†Stone, Patricia, Walthamstow
Stonelake, M. C., Crewe
†Stubbs, B. G., Wythenshawe
†Taplin, J., Gillingham
Taylor, J. W., Birmingham
Telford, T. J., Newton Ab(bot
†Tennant, Shirley J., Staines
Thomas, J., Chester
Thompson, D. J., Nantwich
Thompson, H. P., Stoke-on-Trent
†Timson, P. A., Leicester
†Titterton, Eila P., Tamworth
†Tollitt, Meryl E., Widnes
†Tripper, I., Rossendale
Turton, P. T. H., Warrington
†Vasey, Brenda E., Ripley
†Wade, A., Bristol
†Waine, P. D., Sheffield
†Wale, Judith A., Ealing Common
Walmsley, R. H., Accrington
†Warburton, C., Blackpool
†Ward, Barbara, Preston
†Warner, Margaret M., Vauxhall
Watts, Janet M., Didcot
Weaver, E. D., Street
†White, R. F., Hornchurch
Wilkinson, Mary S., Mexborough
†Williams, D. I. I., Cardiff
†Williams, Joan, Swansea
Williams, W. H., St. Blazey
†Williamson, Helen M., Pinner
†Wilson, T. J., Barnsley
†Wolpert, Ruth, Leyton
Worden, Agnes, Kirkham
†Wright, Isobel M. E., Southampton

NEW PRODUCTS AND PACKS

Linctus for Relief of Cough.—Evans Medical Supplies, Ltd., Speke, Liverpool, 19, announce the introduction of Coscopin linctus, indicated, like Coscopin lozenges, for the symptomatic relief of unproductive cough (and of productive cough when it interferes with sleep). Coscopin linctus is available in bottle of 4 fl. oz. and dispensing pack of 2 litres. Each 2 fl. dr. (7 mils) contains 25 mgm. of noscapine.

Tablets Against Dysmenorrhœa. — Organon Laboratories, Ltd., Brettenham House, Lancaster Place, London, W.C.2, are marketing a new medicinal speciality, Ovestin tablets (each containing 0·25 mgm. of œstriol) against functional dysmenorrhœa. Ovestin is indicated where endometrial stimulation and consequent withdrawal bleeding is not desirable. It is understood to have no side effects or contraindications. The packs are a tube of twenty-five and a bottle of 100.

A General Tonic.—Cuxson, Gerrard & Co., Ltd., Fountain Lane, Oldbury, Birmingham, announce the introduction of a new speciality, Salutone, a preparation of glycerophosphates with nucleinic acid, vitamin B_1 and strychnine forming what is described as "a very effective" general tonic. Salutone is put forward particularly for administration after influenza, when a patient feels tired and depressed. Salutone is packed in 8-oz., 40-oz. and 80-oz. bottles, the two last being tax-free dispensing packs. The product is on the C.F. list.

Diuretic for Oral Administration. — G. D. Searle & Co., Ltd., Lane End Road, High Wycombe, Bucks, announce the introduction of a new oral diuretic speciality, Rolicton brand amisometradine, which is claimed continuously effective on a twice-daily basis. Rolicton is understood to have no contraindications or incompatibilities, and a remarkably low incidence of side-effects, its use involving "no significant metabolic disturbances or depletion problems." It is available in bottles of twenty, 100 and 500 400-mgm. tablets.

Now in Flexi-tube. — Available hitherto only in jars, the "invisible foundation" of Max Factor Hollywood and London (Sales), Ltd., 16 Old Bond Street, London, W.1, is now available in a handy "flexi-tube" pack that is easily and safely carried in handbag, week-end case or travel case. "Invisible foundation" may also be used as a night cream if the skin has been exposed to adverse weather conditions or is for any other reason in an over-dry condition.

Insect-repellent Lotion.—Esso Petroleum Co., Ltd., speciality department, 128 Albert Street, London, N.W.1, have added to their range of Flit products an insect-repellent lotion in 2-oz. bottle.

Canned Cat Food.—Spratt's Patent, Ltd., 41 Bow Road, London, E.3, direct attention to their new canned cat food, Topcat, for which a television campaign is commencing in the spring.

Diet for Budgerigars.—Joseph Farrow & Co., Ltd., Peterborough, Northants, are launching on the British market French's natural feeding diet for budgerigars, claimed "America's biggest-selling bird-food range" and a major part of the business of Messrs. Farrow's American associate the R. T. French Co., Rochester, U.S.A. The British products have the same formulas and package designs as the American, and are claimed the first ready-packed complete feeding diet for budgerigars to be offered to the British public. A special 5-doz. unit pack, the "multi-pack," contains the complete range, including French's budgie seed mixture; "budgie treat" (seeds with added yeast, vitamins and minerals); conditioning food; budgie grit; cuttlebone; budgie bell ("a nutritional and amusing toy"); and canary mixture. Messrs. Farrow refer to a study carried out at French's Pet Bird Institute, Rochester, U.S.A., which revealed that a budgerigar's food requirements vary from time to time according to natural development, and that a bird owner can meet that situation by making available at all times the five basic elements of a natural diet.

TRADE NOTES

Single-ampoule Pack.—Glaxo Laboratories, Ltd., Greenford, Middlesex, announce that freeze-dried B.C.G. vaccine is now available as a single ampoule pack, in addition to the packs previously available.

An Additional Strength. — Boots Pure Drug Co., Ltd., Station Street, Nottingham, announce the availability of an additional strength of Calcipen-V tablets. Each contains the equivalent of 240 mgm. of penicillin V (as calcium salt), and the tablets are issued in containers of twelve, 100 and 500.

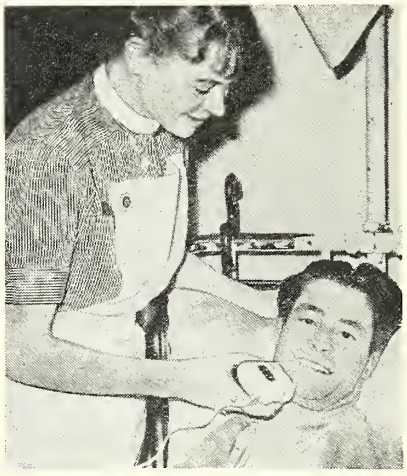
No Suspension.—Allen & Hanburys, Ltd., Bethnal Green, London, E.2, point out (in clarification of a paragraph which appeared under "Notes on New Medicaments" (*C. & D.*, January 11, p. 48)) that they do not market a suspension of Sulpenin V (phenoxymethylpenicillin with sulphadimidine).

Discontinued. — Merck Sharp & Dohme, Ltd., Hoddesdon, Herts, announce that when present stocks of the following items are exhausted they are being discontinued:—Somnos capsules, 0·25-gm. strength (0·5-gm. strength continues); Topaminic ointment, 4-oz. size (1-oz. size continues); Fosmina, all sizes.

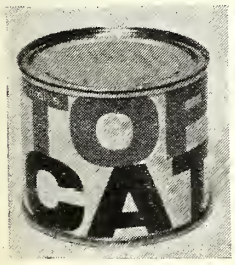
Vial Replaces Ampoules.—Proctocaine (containing procaine, 1·5 per cent.; butyl *p*-aminobenzoate, 6 per cent.; and benzyl alcohol, 5 per cent. in an oily vehicle) is now available from the makers, Allen & Hanburys, Ltd., Bethnal Green, London, E.2, in rubber-capped vial containing 10 c.c. in place of the pack of three 10-c.c. ampoules, which is discontinued.

Change of Policy.—John Richardson & Co., Leicester, Ltd., Evington Valley Road, Leicester, have discontinued the manufacture of official galenicals and packed goods and are concentrating on the production of medical specialities, veterinary products and bulk supplies of tablets and pills (all the products formerly supplied by Damancy & Co., Ltd., continue to be available). The company's surgical department is being expanded, and larger stocks kept of instruments, apparatus and appliances. All customers concerned with the change have been advised, and continuity of supply of packed goods has been safeguarded by arrangement with H. & T. Kirby & Co., Ltd., Newman House, Belton Road, Willesden Green, London, N.W.2.

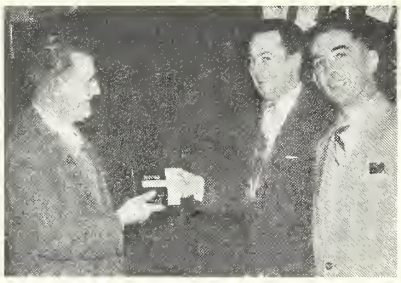
Pharmaceutical and Fine Chemicals. —Sodium para-aminosalicylate is available under the Rhodia trade mark from R. W. GREEFF & CO., LTD., 31 Gresham Street, London, E.C.2.—Sole distributors in the United Kingdom for the monochloracetic acid and sodium monochloracetate manufactured by Farbwerke Hoechst, A.G., Frankfurt, Germany, are HOECHST CHEMICALS.



HOSPITAL SHAVE, 1958: A patient being shaved with a Remington Super-60 electric shaver at Grimsby General Hospital, one of many hospitals throughout the country at which the old methods of shaving patients have been abandoned in favour of electric shavers. Makers are Remington-Rand, Ltd., 26 Kensington High Street, London, W.8.



PRODUCTS FOR PETS: At left, the pack of Top Cat, the newly introduced canned food for cats manufactured by Spratts Patent, Ltd., 41 Bow Road, London, E.3. At right, products in the range of French's natural feeding diet for budgerigars marketed by Joseph Farrow & Co., Ltd., Peterborough.



AUSTRALIAN-MADE: Ronson electric shavers are now coming off the production line from a new plant established in Sydney, Australia, by the Australian associate of Ronson Products, Ltd. The picture shows the first Australian-produced Super Trim being handed over to a member of the sales force.

LTD., 50 Jermyn Street, London, S.W.1.—Drug extracts and fine chemicals available from DR. INVERNI & DELLA BEFFA, S.P.A., 99 Via Ripamonti, Milan, include aconitine, asparagin, colchicine, garlic oil, male-fern extract, squill glycosides, etc.—Botanicals, gums, waxes, essential oils and spices for both the home trade and for export are available from JOHN KELLYS (LONDON), LTD., 24 Old Broad Street, London, E.C.2.

Reformulated. — The Distillers Co. (Biochemicals), Ltd., The Broadway, Wimbledon, London, S.W.19, have reformulated their Distaquaine-V 120 tablets (each containing 120 mgm. of penicillin V acid) and their Distaquaine-V 240 tablets (each containing 240 mgm. of penicillin V acid) to meet the requirements of a monograph which they understand is being included in the British Pharmacopœia, 1958, shortly to be published. From February 1 all trade orders for those products are being met with Distaquaine-V 125 and Distaquaine-V 250 tablets (each containing 125 or 250 mgm. respectively of penicillin V acid). It is pointed out that pharmacists may dispense Distaquaine-V 125 or 250 against prescriptions for the discontinued strengths when stocks of the latter are exhausted, or may supply Distaquaine-V 120 or 240 against prescriptions stating Distaquaine-V 125 or 250 until stocks of the new strengths are obtained (see also p. 55).

Not to Make Galenicals.—Allen & Hanburys, Ltd., Bethnal Green, London, E.2, announce that, on June 30, 1958, they are discontinuing the manufacture and supply of traditional drugs and galenicals. They are continuing, however, to supply capsules, injection solutions, pills and tablets at competitive prices, in addition to their increasing range of medical and pharmaceutical specialities.

Bonus Offers

ROBERTS WINDSOR SOAP CO., LTD., Windsor. Roberts Windsor toilet and bath soaps. Details from the company's representative.

THOMPSON & CAPPER, LTD., Liverpool, 19. Mothaks. 5s. special discount on 1 gross, plus 2½ per cent. for inclusion of a minimum 1 doz. Mothak fly spray, 1 doz. Mothak powder and ¼-gross Parador air freshener. For delivery on or before April 1.

MANUFACTURERS' ACTIVITIES

Flasks for Rally Drivers. — Over 80 per cent. of British entrants in the Monte Carlo car rally are taking with them Vacco vacuum flasks, the manufacturers of which are Vacco, Ltd., Grosvenor Gardens House, Grosvenor Gardens, London, S.W.1.

Sales Conference.—Meggeson & Co., Ltd., Llewellyn Street, London, S.E.16, recently held a sales conference at which important decisions upon future policy were discussed. The meeting was convened by Mr. Maurice P. Stiles, M.P.S. (sales manager) and Mr. R. Campbell Feather was in the chair. At luncheon a presentation was made to Mr. W. A. C. Attwood who retired during 1957, after many years of service with the company.

Lozenges for Ice-cap Geologists. — A generous supply of Victory-V gums and lozenges was provided by C. Fryer & Co., Nelson, Lancs, for members of the 1957 University of Nottingham Jostedalsbrae expedition. In a letter sent later to the company's managing director, the expedition's supply officer recorded that the products remained in perfect condition throughout months of bitter weather The expedition carried out the initial stages of a geological survey on the central Norway ice-cap.

A Client for Thirty Years.—To mark thirty years' happy association between client and advertising agency, Horlicks, Ltd., Slough, Bucks, gave a luncheon in London on January 10 to the J. Walter Thompson Co., Ltd., 40 Berkeley Square, London, W.1. Mr. Patrick Campbell (managing director, Horlicks, Ltd.), presided and with him was Mr. A. P. Mitchell-Innes (director in charge of the account at the agency). The hosts included, in addition to Mr. Campbell, the company's marketing director (Mr. W. R. Bowden), overseas director (Mr. John Horlick) and publicity manager (Mr. Humphrey Chilton). Mr. Campbell referred to "talent, training and experience" as the ideal qualities of an advertising agency. All, he said, had been found with Messrs. Walter Thompson.

Marketing and Advertising. — The sales force of Jeyes-Ibco Sales, Ltd., Millbrook, Manor Road, Chigwell, Essex, met for their annual conference in London on December 19 and 20, 1957. Mr. R. G. Berchem (managing director) presided. During the first morning and afternoon sessions the salesmen were given a general review of market conditions. On the evening of December 20 the board of directors entertained the representatives to dinner and entertainment.

News from the Antarctic. — More than 200 employees, including representatives from the company's London and Nannerch factories, attended the annual party of Neatex Products, Ltd., at Queensferry on December 18, 1957. It was announced by Mr. W. W. Shaw, (managing director) that a bulletin had been received from the Trans-Antarctic Expedition (which is supplied exclusively with the company's Satinex toilet rolls) in which a progress report was sent on the Expedition's achievements. A telegram had been sent to Dr. V. Fuchs on behalf of the company, wishing the Expedition every success on its journey to the South Pole. Mr. F. Maylor, on behalf of the directors, replied to a vote of thanks and thanked all concerned for their co-operation in 1957, particularly in the expansion of the company and the opening of their new factory, to be known as the Planetree Mill, in Shotton, Chester.

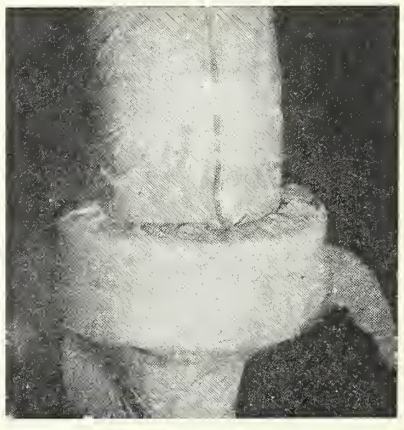
ISOCYANATE FOAMS AND LACQUERS

A new plant in operation for Imperial Chemical Industries, Ltd.

A PLANT for making organic isocyanates, specially built at the Huddersfield factory of the dyestuffs division of Imperial Chemical Industries, Ltd., is now in production. Among its products are four branded isocyanates (Suprasecs SF, D, AC and F) supplementing and to some extent replacing existing products of the company. Used in conjunction with various polymeric reactants Suprasec curing agents produce, according to choice, flexible or rigid foams, soft or hard rubbers, lacquers, textile coatings, adhesives, etc. All have outstanding resistance to chemicals and ageing, and all take colours readily.

Uses in Thermal Insulation

Suprasec SF (tolylene diisocyanate) is used with Daltocel SF (a polyester compound) to produce "polyurethane" foams that can be cut into sheets or otherwise shaped and bonded for use as thermal insulation, clothing interlinings, protective packaging, air filters, etc. Rigid foams of great lightness and strength used mainly for thermal insulation, are produced from other combinations. They may be made where required (even in awkwardly shaped or barely accessible cavities). Polyurethane coatings produced from other formulations offer outstanding resistance to solvents, oils, chemicals and ageing, and provide lacquers for metal goods, varnishes for wood, concrete and other materials. Their high flexibility does not depend on added plasticisers.



Pipe line insulated with flexible foam under polyvinyl chloride outer covering fitted with plastic slide fastener.

RECENT TRENDS IN FORMULATION

New suppository bases; new tablet disintegrants; new problems

THE increasing importance of pharmaceutical formulation was emphasised by DR. R. P. EDKINS when he addressed the opening meeting for the session of the Edinburgh and South-eastern Scottish Branch of the Pharmaceutical Society recently. Now that much of the work of pharmacy had transferred to the manufacturer, said Dr. Edkins, formulation was concerned not only with the original concept of providing a palatable preparation of good appearance having the required content of the medicament in a convenient dose but also with providing a preparation which would be stable for long periods of storage and which would exert its activity at the required site for the requisite time. Excluding the extemporaneously prepared bottle of medicine the greatest volume of preparations now used was represented by tablets and injectable products although two other types of product, suppositories and ointments, should not be neglected.

Solution Within the Body

Until recently there was little advance on the long-established cocoa-butter or glyco-gelatin suppository base. Glyco-gelatin was still useful but criticism had been levelled at cocoa-butter base. Its physical properties made it difficult to handle from the practical point of view and unsuitable for use in tropical climates. To overcome that disadvantage some attention had been given to water-soluble bases, which depended for their action not on melting but upon solution within the body. The use of appropriately moulded tablets of orthodox composition, containing lactose or glucose as the main vehicle was not entirely satisfactory since the tablet type of preparation was sometimes difficult to insert. The resultant solution had a high osmotic pressure and was liable to produce considerable irritation. A better base could be made using a series of waxy compounds obtained by polymerising ethylene glycol. Those substances ranged from liquids of glycerin-like viscosity to solids of paraffin wax appearance, depending on the molecular weight of the polymer (from about 200 to 6,000). All were very soluble in water, the liquid ones being miscible, and the solutions were non-irritant to the mucous membrane. Using mixtures of the solid polymers, a satisfactory suppository could be prepared, in which large amounts of miscible liquids could be incorporated.

The polyethylene glycols had also been used in ointments, where a water-free non-greasy base was required. That was particularly the case where an antibiotic was to be incorporated, since the use of an emulsified base would limit the life of the ointment due to the instability of the antibiotic in the presence of water. Such an ointment might be made of the consistency of soft paraffin and was much more readily absorbed by the skin than was its soft paraffin counterpart.

In the formulation of tablets starch was the classical disintegrant but recently alginic acid and bentonite had been used. Difficulty was always experienced, however, when tablets had to be sugar-coated. Fortunately, it was now possible to dispense with the traditional sugar-coating and to use instead a compressed coat. By that method a small kernel tablet was compressed with a granulate to give a tablet indistinguishable in external appearance from a normal compressed tablet. Normally the kernel tablet was made using a coloured granulate, so that, on breaking the tablet, the presence of the kernel would be obvious, and frequently the finished tablets were screened electronically to confirm the presence of the kernel. Since disintegrants could be added to both granulates the disintegration time of the whole could be made rapid. Since the outside of the tablet could be made to disintegrate more quickly than the kernel, it was possible to apply two medicaments in order to the stomach. That principle was made use of in tablets containing prednisone which had been found to produce gastric irritation in the absence of antacid buffering substances. Prednisone was incorporated in the kernel of the tablet, and a mixture of antacids applied around it. In Spansules, the capsules contained a mixture of minute coated spheres, each type having a different disintegration time, so that a series of medicaments became progressively available.

On the Continent it was becoming common to use the suppository as the vehicle for administering a medicament, on the grounds that, by that route, a more rapid and greater response was produced than by the similar dose given by mouth. The same effect could be achieved if the medicament was applied to the mucous membrane of the mouth and sublingual or sublabial tablets, formulated with a base of lactose or some other inert material without the addition of disintegrants, were the basis of such administration.

Four Fundamental Problems

Stability, duration of clinical action, provision of the required dose in a suitable dose volume, and sterilisation were the four fundamental problems which faced the formulator of an injection. Materials which could not be prepared as a stable aqueous preparation such as protein hormone preparations, serum and chorionic gonadotrophin and penicillin presented problems in 1940. The delivery of powder by weight rendered difficult and inaccurate the filling of quantities of a few mgm as was required in the hormone field. Fortunately the process of freeze-drying shortly became available. Although those expedients led to the production of stable injections, they were only expedients and attempts were continually being made to produce an active injection which was prepared ready for use, and in which the preliminary manipulation of dissolving the contents of one container in another was eliminated. Several methods have been employed to achieve that end. In the antibiotics, the emphasis had been on chemical modification of the molecule to produce derivatives, normally insoluble ones, which were stable in the presence of water but which still exerted their effect upon injection. Often a straightforward attack upon formulation yielded dividends. The decomposition of phenobarb. sodium could largely be prevented if a solution of sodium phenobarbitone was made in propylene glycol containing not more than about 10 per cent. of water. Another method which did eliminate the handling of containers of powder was to dissolve the material in a solvent, usually alcohol, and then to dilute the solution freely with saline before administration as an intravenous transfusion. That procedure was used with the steroid, hydrocortisone. In general, however, twists of formulation of that type had not been particularly successful for most unstable products.

Delay in Absorption

To delay absorption olive and arachis oils were used and an ester, ethyl oleate, was also permitted by the Pharmacopœia. Chemical formulation was also utilised to achieve that object. Thus testosterone was normally given as the propionate because that ester was much more soluble than free testosterone. Before testosterone could exert its characteristic activity, the propionate had to be hydrolysed in the body, to liberate free testosterone. The rate of hydrolysis of that particular ester was fairly rapid but other esters could be prepared which were much more slowly hydrolysed *in vitro,* and therefore exerted their action much more slowly. The use of proteins and other colloids as adsorbents or complexing agents was illustrated by protamine zinc insulin. Protamine as an adsorbent had also been used with success in connection with adrenocorticotrophic hormone, ACTH, and the colloid polyvinylpyrrolidone had a similar delaying effect upon a number of preparations.

Posing its own problems was the crystal suspension exemplified by the widely used suspension of cortisone acetate. That was, surprisingly enough, rapidly absorbed, because the solubility of cortisone acetate was low, both in water and in oils, and it was for that reason that the suspension was used, because it was impossible to prepare a solution containing the required dose in a reasonable volume. Other crystal suspensions in the hormone field were prepared in that form for the same reason. The normal method of preparing such suspensions was to grind the material in part of the suspending fluid, which contained a surface active agent to prevent clumping of the fine particles, a suspending agent to prevent too rapid settling of the suspension, and frequently buffering substances as well. That grinding was usually carried out in a ball mill and after a time, which might vary from a day to a week, dependent upon the material being ground, the particle size could be reduced to about 25 microns

or less. That master suspension was then diluted to the required concentration and filled. Sterility, however, was a serious problem in such preparations. It was possible to ensure surface sterility of the crystals, sometimes by autoclaving under controlled conditions or by treatment with a bactericide, but since the spores were protected by the crystal they would not be killed by either method. Even more serious contamination would not be detectable by normal methods of sterility examination, since the spores would not grow until the crystal surrounding them had been dissolved. It seemed that the methods of testing for sterility of crystal suspensions should be reconsidered.

The ball-mill method followed by suspension in a suitable vehicle normally failed with cortisone acetate. By chance, however, it was discovered that if cortisone acetate was mixed as a dry material with dilute ethyl alcohol it almost immediately changed into a mass of needle-shaped crystals which were ideal for the preparation of suspensions and which were quite stable provided that they were not allowed to dry. The mechanism of the change was unknown and it was strange but convenient that the conversion would not usually take place unless the cortisone acetate had been sterilised or at least heated for some time prior to the mixing.

WHOLESALERS FACE THEIR CUSTOMERS

Glasgow panel of three answers chemists' questions

ACTING as spokesman for a panel representing Glasgow wholesalers, MR. J. AITCHISON recently addressed members of the Glasgow and West of Scotland Branch of the Pharmaceutical Society of Great Britain on the relationship between wholesale and retail. His colleagues were MR. P. SHIELDS and MR. W. COOPER. Mr. Aitchison said that, about forty to fifty years ago, a pharmacist's stock consisted of herbs, barks, chemicals and pharmacopœial preparations but few proprietaries and sundries. The pharmacist made most of his galenicals and packed his own lines. The next step was to buy his packed goods and buy his galenicals from his wholesale house. Under the old National Health Insurance scheme it was common practice in England to buy National Formulary preparations ready made, but that was not the case in Scotland. A big business grew up in N.F. concentrates, and the laboratories of the wholesalers gradually became a central dispensary for many pharmacies, making pills, powders, ointments, etc. He thought that the multiples received an undue proportion of prescriptions for pills, pessaries, suppositories, plasters, etc. The turnover in galenicals was now less than 5 per cent. of a wholesaler's business, and the supply of Dangerous Drugs was carried out at a loss. Direct orders, he said, were only justified when wholesalers' accounts were paid promptly.

Glasgow wholesalers were not stocking any new line that did not show a gross profit of 15 per cent., but they were still carrying many lines that showed only 12½ per cent., and to obtain that goods had to be paid for in thirty days and sometimes in seven days. Was it reasonable for retailers to expect three months' credit when borrowed money—and most wholesalers had to borrow money—could not be got at less than 8½ per cent.

MR. A. G. BANNERMAN asked why Glasgow retailers could not have a daily delivery.

MR. SHIELDS said that was not the first time such a service had been requested. They were always trying to improve deliveries.

Holiday Closings

MR. C. N. LAWRIE put forward a plea for consideration for retailers who were at the end of a run; would it not be possible to reverse the run on alternate weeks? MR. J. SUMMERS objected to the closing of all wholesale premises for two consecutive weekdays or Saturday, Sunday and Monday on public holidays. MR. W. COOPER said that that was a perennial question. Wholesalers had a special difficulty, with Trade Union employees working under J.I.C. conditions. MR. K. SCATCHARD said that he was aware of the many difficulties, and suggested that the wholesalers could work rota services. MR. AITCHISON said that that had been tried out recently in Edinburgh, when one firm opened on a holiday for several hours at a cost of £25 and did not have a single order. MR. J. D. MAIR thought that wholesalers were rather unrealistic in their refusal to handle any new product which did not bear a 12½ per cent. gross profit. Chemist contractors handled many items and were not in a position to decide what the profit per cent. should be. MR. COOPER thought that wholesalers were not the only body which was organised to "stick up for its rights," pointing out that contractors, not so very long ago, had been prepared to band together and tear up their contracts, an example of strong negotiation. MR. J. STEWART paid tribute to the excellent service given by the wholesalers. He wondered if the wholesalers had a system for the stocking of exceptional proprietaries.

"Highly Competitive"

MR. SHIELDS said that there was no such agreement. Wholesaling was a highly competitive business, and he could not imagine one house holding stocks not available in others. He explained that firms which marketed new products sent a pilot stock to wholesalers without asking. MR. A. OFFICER gave six examples of prices taken from a current price-list, and said that the handling charges in each case appeared to him to be excessive. MR. SHIELDS explained that there was a costing department in the Association and that department fixed the figure for the whole country. He said that "free" containers had to be taken into account when arriving at the prices for small quantities but admitted that anomalies existed. It was inevitable that there should also be errors. MR. MAIR, referring to the investigation into drug prices, said that the price paid for a quantity of a drug was not necessarily the factor that would influence the price fixed for tariff purposes. What would decide that would be the price paid for a quantity which a contractor would use in two months. MR. STEWART asked if wholesalers would be prepared to meet the demands on their stock which a further outbreak of influenza epidemic might bring. MR. AITCHISON said that that depended on supplies from makers. Capital was another consideration which had to be taken into account. MR. SCATCHARD asked if orders taken over the telephone could not be taken on tape-recorders. MR. COOPER said that that was a matter for each individual wholesaler to decide. Some were using them and they speeded up the taking of orders. MR. SHIELDS pointed out the danger that a touch of a switch could erase a whole order. MR. COOPER explained the legal obligation imposed upon wholesalers to obtain a signed order, giving the name of the messenger, for sales of Dangerous Drugs at the counter. Mr. R. B. Birrell (chairman) presided, and a vote of thanks to the panel was proposed by MR. R. ANDERSON (vice-chairman).

RELYING ON CHEMISTS

An increasing trend among doctors

AFTER stressing the importance of pharmacology in the pharmaceutical curriculum, DR. H. K. CHILDS (chairman, Portsmouth division, British Medical Association) said at the annual dinner of the Portsmouth Branch of the Pharmaceutical Society on December 4, 1957, that general practitioners were increasingly relying on the pharmacist's knowledge of the newer drugs. Mr. N. L. Banks (Branch chairman) and Mrs. Banks welcomed members and guests, who included the lord mayor and lady mayoress of Portsmouth and Mr. D. W. Hudson (president of the Pharmaceutical Society) and Mrs. Hudson. Dr. Childs, who was proposing the toast to the Pharmaceutical Society, spoke of his personal association with pharmacy through his grandfather, who had been in business as a pharmacist in Portsmouth. It was interesting, he said, that the branch chairman had been apprenticed at that pharmacy (T. O. Barlow), the premises of which, unfortunately, had been destroyed during the 1939–45 war. In responding to the toast MR. HUDSON spoke of the Society's new educational requirements and their relevance to modern training. He also spoke of the importance of the pharmacy department at Portsmouth Technical College and the need to expand to keep pace with current developments. MR. BANKS proposed the toast to the ladies and guests, and the lord mayor suitably replied. Toastmaster and M.C. was Mr. J. C. Bloomfield (social secretary and a member of the Society's Council).

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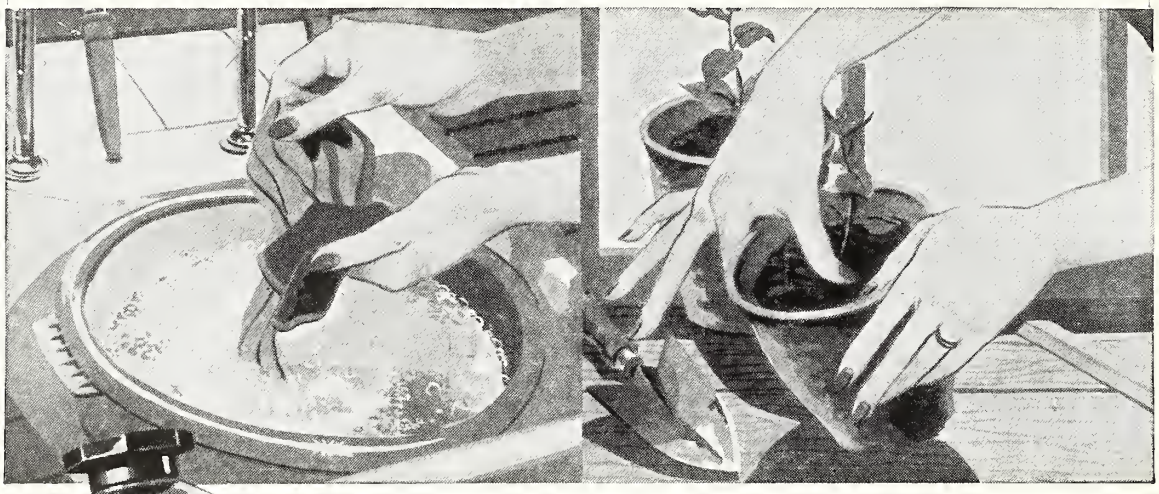

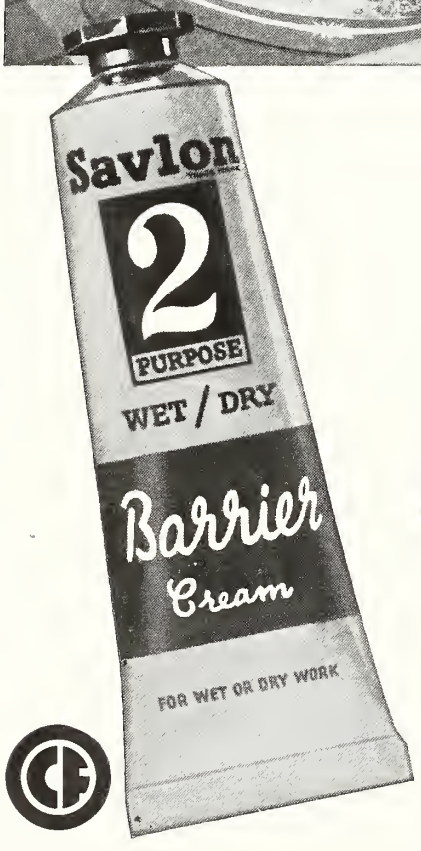

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Ethics of News-column Publicity

THE Council of the Pharmaceutical Society has, in a figurative sense, taken a deep breath and made a New Year resolution to threaten disciplinary action—next time it becomes necessary—against the featuring of dispensing services in newspaper editorial columns.

The news will no doubt be warmly received by many owners of single pharmacies. In effect it means that at last the Council is going to tackle the big boys. For just as the rich and the poor have equal freedom (but decidedly unequal opportunity) to dine at the Ritz, so the one-shop proprietor is seldom the one to find his pharmacy featured by the editor of the local paper, let alone a national daily. The publicity goes, for obvious reasons, to the large organisation. Not that it is any more ethical for a "small man" than for a large multiple to be "splashed" on a centre page. It is only more galling to believe or suspect that the defenceless individual is pounced on and the mighty company rather more timidly reproved.

Of course there is always the possibility that an editor has himself been exclusively responsible for such a feature and that the pharmacist or corporation has had no part or lot in presenting the story. Some will regard that possibility, even if they are not fully versed in the machinations of "public relations," as itself a "likely story." The outcome of the action, if any, taken by the Council, and the means taken to nail the responsibility, through the type barrier, on to the pharmacist or corporate body answerable to the jurisdiction of the Statutory Committee will be keenly watched. But it must never become part of the Council's basis of action that there are no circumstances in which a pharmacist's name or the title of his business may appear in print. The opening of a new pharmacy in an area, or the provision of a new service may, in the public interest and for the public's convenience, need to be made known, and that would be difficult without the mention of a name. Those circumstances add up to a once-for-all occasion that calls for no special action because it involves no real abuse of principle. Every case must continue to be examined on its merits, and as a minimum the element of intervention to secure editorial mention for commercial advantage must always be proved before penalties are enforced.

"Sealing-wax and Baling-wire" Research

A MESSAGE unorthodox but hopeful for the future of research by the individual as against the large corporation (and by inference for British as against American), comes from the Perkin medallist of the Society of Chemical Industry: Dr. William J. Kroll.

Dr Kroll, a metallurgist, in his address as medallist (*Chemistry and Industry*, January 11, p. 26) tells how, after several years in a bell foundry, in which his ingenuity was both taxed and developed, he decided to return to his home country of Luxembourg with the idea of establishing a research laboratory of his own for the study of rare metals. "At that time such a project of a single man, working with his bare hands and with his own wits, had to be considered by any normal metallurgist as sheer lunacy. But the events showed me to be right." Dr. Kroll's confidence and its justification by results left him, naturally enough, with a strong bias to "sealing-wax and baling-wire" science and a healthy scepticism towards overworship of teamwork in research. "Our educational system . . . which leads to conformism, has thrown overboard the pioneer, and has tried to replace him by the democratic team."

The individual inventor pitches his ingenuity against the financial resources of the teams. He may seem to be under a handicap, but "often a secret hand guides him to his goal." The Curies "did not need more than a shack." Fleming "did not need more than a few dishes." "From my long experience in the United States," said Dr. Kroll, "I can assure you that many laboratories of our country are over-gadgeteered and drowned in complicated equipment."

For our part we would not go all the way with Dr. Kroll. In medical research, particularly, the team work of chemists, biologists, clinicians and pharmacists can boast its successes. It is indeed essential for great projects. Yet the truth remains that "great discoveries are still so close to the surface that they can be unearthed with little expense by nonconformist individuals," and what goes for the lone wolf should go for the small firm. There seems no call for the small pharmaceutical manufacturer to leave research entirely to the larger, or for British manufacturers to adopt the attitude that it is hopeless to try and compete with the great American corporations.

ECHOES OF THE PAST

A WOMAN PIONEERS INOCULATION

From "A Short History of Social Life in England" by M. B. Synge, F.R.Hist.S. (Hodder & Stoughton, 1906).

IT is interesting to note that it was reserved for a woman to introduce into England the system of inoculation for small-pox. This disease was still rampant, some 3,000 persons dying of it in London alone in the year 1719. Inoculation, which consisted in procuring a slight attack of small-pox by means of incision, was practised at Constantinople, where Lady Mary Wortley Montague had her five-year-old boy inoculated in 1717. The child at once had a slight attack of small-pox, from which he easily recovered. The King's daughter-in-law took up the subject; experiments were made on condemned criminals and charity children, and the results being satisfactory, the two little Princesses of nine and eleven, granddaughters of George I, were inoculated with marked success. But the idea grew slowly, and it was not till 1740 that inoculation came into general use.

Thus while, under George I, great ideas were slowly developing among the more enlightened and educated members of the English community, the common people persisted in their old-world remedies. They tried to cure asthma by drinking a wine-glass of wine in which wood lice were steeped, cramp by wearing garters made of rosemary leaves sewn up in fine linen, loss of memory by rubbing the temples with castor oil and swallowing small pieces of a swallow's heart every morning for a month, till one wonders whether these odious and inadequate remedies did not kill more of our poor ancestors than they cured."

RADIOACTIVE SOLUTIONS IN PHARMACY

A consideration of their decay and dilution in relation to the calculation of quantities for dispensing

NORMAN JAMES DUNNING, M.A. (Cantab.), B.Sc. (Lond.), A.Inst.P.
(lecturer in physics, City of Portsmouth College of Technology)
and PEGGY P. DUNNING, M.P.S.

THE inclusion of radioactive materials in the next Pharmacopœia, as has been promised, means that pharmacists will be expected to know how to dispense them. The purpose of this article is to discuss as briefly as possible, the way in which the radioactivity of an element varies with time; to introduce the units which are used to measure " activity " and then to indicate how the theory may be applied, by a simple graphical method—using semi-logarithmic graph paper—to examples employing three compounds, two of which will be included in the 1958 British Pharmacopœia. It must be stressed that radioactive materials should only be stored and handled in dispensaries which have been properly constructed and equipped to guard against all the possible radiation hazards.

Radioactivity

In 1896 Becquerel discovered that uranyl double sulphate emitted some penetrating radiation which would blacken a photographic plate after passing through black paper and glass. The radiations from a radioactive element render a gas a conductor of electricity and by that method it was discovered that the activity (A) of a radioactive element varies with time according to the law

$$A=A_o e^{-\lambda t} \quad (1)$$

It is precisely that property of the radiation rendering a gas conducting that is exploited in the Geiger counter today. Thus, when such an instrument indicates a certain number of " counts per second " from a given volume of liquid it can be said that the activity of the solution is the number of counts divided by the volume. Using that, equation 1 can be verified, where A_o is the number of counts per unit volume at time $t=0$ when the observation begins, and A is the number of counts per unit volume at time $t=t$ hours later.

It was in 1903 that Rutherford and Soddy put forward the hypothesis that radioactivity is the spontaneous transformation of an atom of one element into an atom of another element accompanied by the emission of a " particle " which will render a gas conducting. From that it is seen that each count in a Geiger counter is caused by one of those particles.

In terms of the number of radioactive atoms of an element present, the fundamental law of radioactive decay is

$$N=N_o e^{-\lambda t} \quad (2)$$

which can be written

$$\log N=\log N_o-0.434\lambda t \quad (3)$$

Where N_o is the number of radioactive atoms present when observation begins and N the number present t hours later. λ is the radioactive decay constant and differs for each radioactive nuclide, being 0 for stable nuclides. The term nuclide—which means an atom with specific nuclear properties—is introduced so that the isotopes of an element may be differentiated, by the different values of λ. That is usually done in terms of the half-life ($T_{\frac{1}{2}}$) which may be defined either as the time taken for half the initial number (N_o) of radioactive nuclides to disintegrate, or as the time for the initial activity (A_o) to fall to half its value. Putting

$$\frac{N}{N_o}=\frac{1}{2}=\frac{A}{A_o} \text{ when } t=T_{\frac{1}{2}}$$

in equation 3 or equation 1 gives

$$T_{\frac{1}{2}}=\frac{0.693}{\lambda} \quad (4)$$

so that the law of radioactive decay may be written

$$\log N=\log N_o-0.301\frac{t}{T_{\frac{1}{2}}} \quad (5)$$

The variation of activity with time is given by the equation

$$\log A=\log A_o-0.301\frac{t}{T_{\frac{1}{2}}} \quad (6)$$

Tables of $T_{\frac{1}{2}}$ for all isotopes may be found in many books on isotopes which discuss the physics in much greater detail than is possible in this article. (One example is " Nuclear and Radiochemistry," by Friedlander and Kennedy, published by Wiley.)

Units

The basic unit for the measurement of radioactivity is the Curie (C) which is defined as $3{\cdot}7 \times 10^{10}$ disintegrations per second (d.p.s.).

The radioactive strength of a material may be represented by its specific activity, which is defined as the number of nuclides decaying per second per gm. of solid material or per millilitre (mil) for solutions. The units would be curies per gm. for solids and curies per millilitre (C/mil) for solutions.

When radioactive material is processed with stable material, the number of d.p.s. does not alter, but, because of the dispersal, the value of the specific activity alters. However, the activity (A) of material may be quoted in several different ways, two of which are related by a chemical factor (F). Thus if a sample of solid sodium chloride is quoted as having an activity of A curies per gm. of sodium, then it has an activity of AF curies per gm. of sodium chloride where $F=\frac{23}{23+35{\cdot}5}=0{\cdot}39$

Another way in which activity may be quoted is in terms of A curies per mole which means $A \times 3{\cdot}7 \times 10^{10}$ d.p.s. per gm. molecule of the compound, which gives $\frac{A}{M}$ curies per gm. of the compound, where M is the molecular weight of the compound.

Anyone dealing with radioactive material containing more than one radioactive nuclide (for example radio sodium radio iodide i.e. $Na^{24}I^{131}$) must notice whether the activity is quoted for the disintegrations of one nuclide alone or for both nuclides. In the latter case the method given below must be used for each nuclide alone and the results subse-

quently combined. It would be necessary to know A_o in curies per gm. of each element.

When one gm. molecule of a compound of activity A curies per mole is made up into a molar solution then the solution will have activity of $\frac{A}{1000}$ curies per mil; which may be quoted as a molar solution of activity A curies per mole.

The curie and mole are large units, so the usual decimal subdivision is employed thus

1 millicurie (mC) $=10^{-3}$ curie $=0{\cdot}001$ C
1 microcurie (μC or micro C) $=10^{-6}$ curie
$=0{\cdot}000001$ curie
$=0{\cdot}001$ mC
$=10^{-3}$ mC

1 millicurie per mgm. molecule
(1 mC/mM) $=10^{-3}$C per 10^{-3}M
$=1$ C/M
1 μC/mil $=10^{-6}$C per 10^{-3} litre
$=10^{-3}$C/litre
$=1$mC/litre

Those few examples may indicate how the units of "activity" may be interchanged.

Application

A pharmacist who has a stock solution which was supplied at a quoted activity of A_o, may have to make allowance for the decay when dispensing a solution of activity A_1 at time t_1 hours, so that it will have an activity A_2 when it is to be administered, t_2 hours after the supplied stock solution had activity A_o. That may easily be done by drawing a graph of equation 6 for each substance used.

Three compounds which the pharmacist may have to handle will now be discussed, they are sodium radiophosphate; sodium radioiodide; and radiosodium chloride

The table gives the details of the radioactive nuclides.

Atom	$T_{\frac{1}{2}}$
P32	343 hours
I131	193 hours
Na24	15 hours

Substituting $T_{\frac{1}{2}}$ in equation 6, equations for the variation of activity with time, of compounds containing one of the radioactive nuclides are obtained:

For P32 compounds

$$\log A = \log A_o - 0{\cdot}000878t \qquad (7)$$

For I131 compounds

$$\log A = \log A_o - 0{\cdot}00156t \qquad (8)$$

For Na24 compounds

$$\log A = \log A_o - 0{\cdot}020t \qquad (9)$$

From those equations graphs are drawn for the variation of A with t.

The number of the corresponding equation is given on the graph, it being noticed that the time scale for Na24 is ten times as large as for the other two. The use of semi-logarithmic graph paper enables A to be read off directly without the use of mathematical tables.

The significance of the half-life ($T_{\frac{1}{2}}$) is obvious from the graphs from which it is seen that the activity changes from 10 to 5 in time $T_{\frac{1}{2}}$ and from 10 to 2·5 in 2 $T_{\frac{1}{2}}$ hours.

That indicates that the graph of log A against t may be drawn by plotting any two of the points

$A_o=10$ on the logarithmic scale for $t=0$ on the time scale.
$A=5$ on the logarithmic scale for $t=T_{\frac{1}{2}}$ on the time scale.
$A=2{\cdot}5$ on the logarithmic scale for $t=2T_{\frac{1}{2}}$ on the time scale.
and drawing a straight line through them.

Taking $t_1=100$ hours and $t_2=110$ hours it is seen that the activity of P32 decays by about 2 per cent. and of I131 by about 3·6 per cent. in the ten hours it is standing after dispensing, prior to administration. Obviously, the pharmacist will not have to allow for the decay of solutions containing P32 and I131 which are used on the day they are dispensed. However, for Na24 solutions the radioactive decay may be neglected only if either wide limits of activity may be tolerated, or the solution is dispensed within an hour of administration.

Calculation

(i) SODIUM RADIOPHOSPHATE

Sodium dihydrogen phosphate may be purchased from the Radiochemical Centre, Amersham, with a specific activity of 5 millicuries per mgm.-molecule. Since the molecular weight of the compound is 120, if 1·2 gm. of the unhydrated salt is made up into a solution of volume 1 litre it may be regarded as a stock solution which had activity

$A_o = 1{\cdot}2 \times \frac{5}{120 \times 10^{-3}}$ millicuries per litre which is 0·05 millicuries per mil or 50 microcuries per mil at the time Amersham quoted 5mC/mM for the salt they supplied.

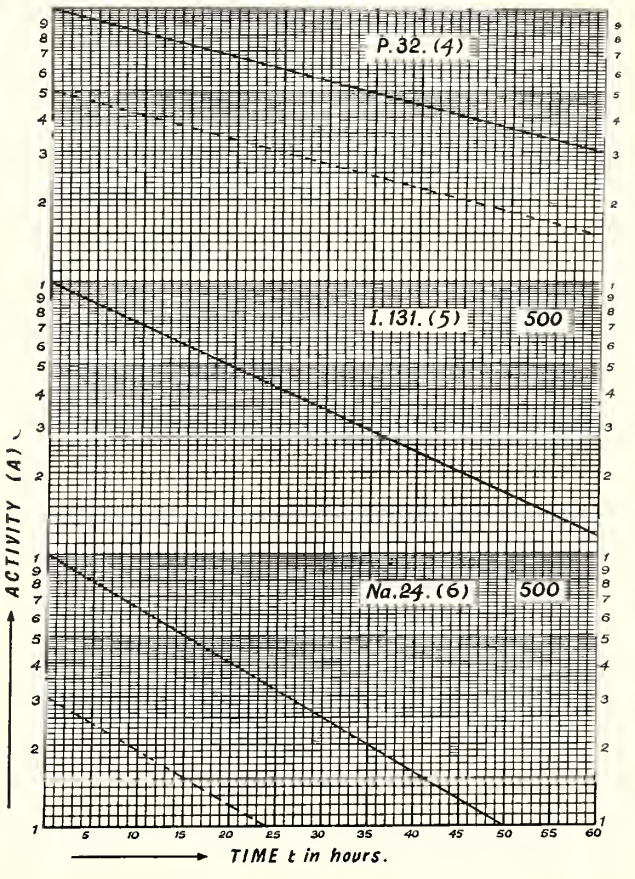
The way in which the activity of that solution varies with time as the P32 atoms disintegrate is found by drawing a line through 5 on the activity scale parallel to the standard decay line for P32 and noticing that it passes through activity 25μC/mil at time 343 hours.

If at time $t_1=240$ hours (ten days) 10 mils of a solution of activity 10μC/mil are required, from the graph it is noticed that the stock solution then has activity 31μC/mil, so by taking $\frac{100}{31} = 3{\cdot}3$ mils of the stock solution and making up to 10 mils, the prescription may be dispensed.

(ii) SODIUM RADIOIODIDE

An iodide solution may be purchased from Amersham with specific activity greater than 10 curies per mgm. of iodine. Thus, a stock solution with initial activity as high as 10 curies per mil may be obtained.

What must be carefully observed is that when the radioactive decay is plotted on logarithmic graph paper, the units



on the activity scale may be changed at will, so that with A_o=10C/mil the figure 5 stands for 5C/mil. All that is necessary is to draw the decay line through the point representing the numerical value of A_o, then the units of A_o (governed by powers of 10) decide whether 2 represents 2mC/mil or 200μC/mil.

(iii) RADIOSODIUM CHLORIDE

For stock, a saline solution with A_o of 1 millicurie per mil may be purchased from Harwell. One mil of a solution of activity of about 10 to 20μC/mil is required for blood circulation tests.

From the graph it is noticed that a stock solution of initial activity 1mC/mil which is A_o=1000μC/mil will have activity 100μC/mil after fifty hours. Now assume that the zero reading on the time axis corresponds to fifty hours and that the starting point of the standard decay line passes through A=100μC/mil, then at point 50 on the time axis, now corresponding to 100 hours decay, the activity of the stock solution has fallen to 10μC/mil. Using the graph in the latter way it is seen that the activity has decayed to 20μC/mil (A=2) after 85 hours (t=35) and 15μC/mil (A=1·5) after 91 hours (t=41).

Suppose that from a stock solution with A_o=1mC/mil it is required to dispense at t_1=50 hours ten 1-mil samples of activity 15μC/mil at t_2=60 hours. The total activity required will be 150μC in 10 mils or 180μC in 12 mils at 60 hours. By drawing a line through A=1·8 at t=10, it is found that the solution must have activity 283μC in 12 mils at 50 hours (represented by t=0). Now at 50 hours, the stock solution has in 1 mil an activity of 100μC, so that 2·83 mils will have an activity of 283μC.

By taking 2·83 mils of the stock solution and making up to 12 mils, ten 1-mil samples may be dispensed for use on the following day.

The following check calculation shows the accuracy of the graphical method.

Substituting in equation 9, A_o=1000μC/mil and t=60 hours

$$\text{Log } A = 3{\cdot}0 - {\cdot}020 \times 60$$
$$= 1{\cdot}80$$
$$A = 63{\cdot}1\mu\text{C/mil}$$

Activity in 2·83 mils=178μC

That is made up into a solution of total volume 12 mils which will have activity 14·8μC in 1 mil. The accuracy is better than 2 per cent.

Precautions

No pharmacist should stock or handle any radioactive material until he is fully acquainted with the health hazards of the particular radioactive nuclides it contains. As a broad generalisation, more than 1 millicurie should be kept only in a properly prepared store. Strong sources should be manipulated with tongs, behind lead brick walls in a fume-cupboard. Plunger pipettes must always be used. Atoms such as P32 which only emit β radiation are much easier to shield; but γ emitters should always be regarded as dangerous.

Onward from Galen

A CURRENT CAUSERIE

Do the resignations of Mr. Thorneycroft and his colleagues portend any lessening of Treasury control over the other Ministries? There is little doubt that the recent rejection of the Hospital Service award was dictated by the Treasury, at whose door lies also the insistence on maintaining "average" pricing in the face of growing evidence of its inadequacy. From the Treasury, too, probably comes the continued pressure for "strong measures" in regard to the prescribing of proprietary drugs. The administrative officers of the Health Departments are in day-to-day contact with pharmacy, and may be expected to accumulate some acquaintance with pharmaceutical matters and pharmacy's technical background which remote Treasury officials cannot have or readily acquire. It can be imagined that the Ministry of Health would breathe more freely if given more liberty. The cost of the Service would not necessarily rise, and might conceivably fall, if there were greater freedom at Savile Row to modify arrangements in accordance with the specialist knowledge of the pharmaceutical set-up. Certainly without full pricing pharmacists can never feel any confidence that they are being fairly paid for the goods and service they provide.

★

PHARMACEUTICAL and chemical industries together give more to charity than any other group of firms in an average year. That premier position is revealed in *Business and the Community*, a survey, published on January 6, of industry's contributions to science, the arts, education and the nation's welfare. In an inquiry conducted on behalf of Arthur Guinness Son & Co., Ltd., more than 900 British firms were approached and the nation's industrial and business concerns were divided into sixteen groups. The survey was commissioned to try to establish what standards a company should apply when dealing with the innumerable requests received each year to assist charitable causes. Using information supplied by 232 firms the survey team established that the average donation made by each during the three years 1953 to 1955 was £5,104. A total of £285,568 was given to charity by twenty-three chemical and pharmaceutical firms, an average of £12,416 per firm. Seven shipbuilding and shipping concerns gave an average of £8,736 each and twenty-two motor vehicle and aircraft firms £8,670. It was found that, so far as the chemical and pharmaceutical industries were concerned, 33·8 per cent. was given to research; 28·2 to education; 18·7 to social services; 4·9 to national trusts; 1·7 to Service and ex-Service causes, and 12·7 to "miscellaneous." The social services generally received a high proportion of all donations. Research and education also received large amounts. Sixty per cent. of all contributions were made because it was considered they would benefit the company directly or employees indirectly. Fourteen per cent. of contributions went to national appeals (for reasons of increased company prestige) and the same percentage was allocated as a result of purely *ad hoc* decisions when appeals were treated on merit. Only 6 per cent. of the contributions are recorded as being "purely philanthropic" donations.

NEW BOOK

The Lynn Index

Massachusetts College of Pharmacy, 179 Longwood Avenue, Boston, 15, Massachusetts, U.S.A. 9 x 6 in. Pp. 46. $1.

THE late chairman of the Department of Chemistry, Massachusetts College of Pharmacy (Dr. Eldin V. Lynn), spent many years searching the literature for references to phytochemistry. The results of his work on the subject are to be found on about 80,000 index slips at the College in a collection that has come to be known as the "Lynn File." Two professors of the College faculty have recently undertaken the organising and editing of the material for publication, and monograph I of the Index now appears as a booklet. The work of editing was done under a grant furnished by Smith, Kline & French Laboratories, Inc. The contents of each monograph are arranged to show what work has been reported on a given plant and what constituents have been isolated and identified. Each is concerned with species from a single plant family or from a group of related families and the present monograph I deals with the order *Centrospermæ*.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN

"ADVERTISING" BY NEWSPAPER ARTICLE

Statutory Committee action to be taken

A COMPLAINT that dispensing services had been advertised through the medium of a newspaper article was considered at the Council meeting of the Pharmaceutical Society on January 7 and 8. The Council agreed to issue a statement announcing their intention to refer to the Statutory Committee any further evidence received of the advertising of dispensing services and to report to the Press Council the Council's views on the publication of such newspaper articles.

New Examination Regulations

A draft of new regulations for the Pharmaceutical Chemist Qualifying examination was approved, subject to certain alterations. The final draft is being placed before the Council at its next meeting, together with the comments of the Scottish Department.

Letters were received from the Royal College of Science and Technology, Glasgow, stating that it was not proposing to conduct a course for the Pharmaceutical Chemist Qualifying examination after the one commencing in the autumn; and from the Chelsea College of Science and Technology stating that the annual intake of Pharmaceutical Chemist diploma students was being reduced from forty-eight to twenty-four. Heads of schools of pharmacy are meeting on February 12 to discuss accommodation requirements for the three-year course.

A Preston Branch resolution expressing opposition to the new educational policy, and requesting further discussion before it was implemented, came before the Education Committee. In view of the decision, taken at the December 1957 meeting of the Council (see *C. & D.*, December 14, 1957, p. 648), that no useful purpose could be served by delaying action on the proposed three-year course, the secretary was instructed to send an appropriate reply.

The Registers

It was reported that in December 1957 forty-one persons had been registered as "student," making a total of 853 for the year, against 777 in 1956. Four former members had had their names restored to the Register and the Council approved a recommendation for the restoration of three names that had been removed from the Register ten years previously. Recommendations were also approved for the registration of seven persons under reciprocity arrangements.

THE PRESIDENT reported that Dr. B. A. Young, Professor A. D. Macdonald and Dr. W. Lane-Petter had been appointed additional members of the Council for a further period until January 28, 1962, as nominees of the Privy Council. Reference was also made to the award of the O.B.E. in the New Years Honours to Mr. G. H. M. Graham (chairman, Central N.H.S. (Chemists Contractors') Committee). The Council agreed to send Mr. Graham a message of congratulations.

Joint Formulary Committee

The following representatives were reappointed to the pharmaceutical side of the Joint Formulary Committee now being reconstituted for the preparation of a new British National Formulary: Messrs. G. T. M. David, D. W. Hudson, E. T. Kent, and T. Reid, Dr. E. W. Skyrme, Messrs. J. W. Hadgraft, A. W. Bull and H. G. Rolfe, Professor H. Brindle, and Mr. J. Wright.

Testing of Veterinary Substances

The receipt was reported of a letter from the Agricultural Research Council stating that a scheme had been initiated by which tests of veterinary therapeutic substances could be made under the authority of a Veterinary Therapeutic Testing Board. Dr. G. Brownlee and Dr. K. R. Capper had been appointed to that body after consultation with the Society.

Charter Travelling Scholar

The Education Committee received a copy of the published research of Dr. Ralph Kohn, to whom a Charter Travelling Scholarship had been awarded in 1954 and who subsequently received an Education Grant to enable him to undertake research in London. MR. C. W. MAPLETHORPE (chairman of the Committee) said that Dr. Kohn's work was a great credit to pharmacy and the award made to him for that purpose was one of the best things that the Council had done in developing pharmaceutical research.

Benevolent Fund and War Aid Committee

The Benevolent Fund and War Aid Committee's report showed that grants amounting to £121 had been made to five widows and one member. Recommendations for grants amounting to £494 to two other widows and three members were approved by the Council. Four applications were deferred. From the Orphan Fund grants amounting to £128 to two widows, and from the War Aid Fund two grants amounting to £50 were made. The Committee approved payment of £3 each from the Benevolent Fund to beneficiaries whose grants expired in December. In the last quarter of 1957 fifty-seven grants amounting to £3,144 had been made, against fifty-eight grants and £3,257 in the last quarter of 1956. Disbursements from the Benevolent Fund during 1957 amounted to £12,692, against £12,821 in 1956. Income was £15,380 (subscriptions £8,460) against £16,616 (subscriptions £8,202) in 1956. Three grants from the War Aid Fund in the December quarter of 1957 totalled £277, against four grants and £304 in the December quarter of 1956. Christmas gifts of £2 2s. each had been made to forty-five children under sixteen, whose parents were receiving assistance from the Benevolent Fund, and to three children of War Aid Fund beneficiaries.

In presenting the list of special contributions MR. T. HESELTINE (chairman) said that, although as a rule it was considered invidious to mention individual contributions, he felt that he must call attention to the unusually successful effort made by the Liverpool Branch in raising £200 for the Benevolent Fund at their annual dance. It was a record so far as his memory went. The Council offered its special thanks to Liverpool.

Birdsgrove House

The Warden's report showed that in the month to December 16, 1957, eleven guests stayed at the convalescent home for an aggregate of ten weeks, against twenty-four guests and forty-one weeks in the corresponding period of 1956. Two contributions (total £6) were received from guests to supplement weekly payments. Gifts in kind were also reported.

Law Committee

In November 1957 the Society's inspectors and agents visited 1,354 authorised sellers, 163 listed sellers and 339 drug-store proprietors and similar traders. Six cases of alleged infringements of the Pharmacy Acts were considered and appropriate action taken.

THE PRESIDENT reported with regret the deaths of Mr. Paul Dobson, Leeds (a member of the Society's board of examiners for England and Wales), Mr. John McGregor, Belfast (a past president of the Pharmaceutical Society of Northern Ireland), and Dr. A. J. Ewins (Harrison Memorial Medallist,

1943, and a former member of the Codex Revision Committee and its pharmaceutical chemistry subcommittee).

THE REGISTRAR (Mr. F. W. Adams) made a preliminary report on his journey to Australia to attend as the Society's representative the centenary celebrations of the Pharmaceutical Society of Victoria, from which he had returned on December 21.

The names of three young pharmacists who have been selected to visit Jugo-Slavia for one month so as to gain experience of pharmacy in that country were announced. They are Misses J. E. Dearing, B. E. Hughes and M. E. McClelland.

The Council confirmed proposals to amend the by-laws on funds and property, on examination, and on members—registration of premises, of which notice had been given.

The Council had as a guest at its meeting Mr. Gerald O'Neill (a member of the Council of the Pharmaceutical Society of Ireland) who was on a private visit to London.

Correspondence

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

Brain-washing

SIR,—I am not in the pharmaceutical camp represented by the movement at whose conference Mr. J. Stonehouse, M.P., is reported (*C. & D.*, January 4, p. 2) to have said that "beyond a certain point advertising . . . became anti-social." How I do agree with him, though. I say it becomes "brainwashing."

H. T. A. GRETTON
Arnold, Nottingham

Colour Prints Astray

SIR,—Can any of your readers help me in tracing a package of colour prints intended for me and sent by Ilford, Ltd., on December 3, 1957, and not received by me. The package would contain seven Kodachrome 2 x 2-in. transparencies and one Ferraniacolor 2¼ x 2¼-in. transparency with an Ilford colour print from each, docket number 603,703. There is a possibility that the package was addressed to another dealer in error, and it might have been put aside during the Christmas rush and overlooked. Any news of the package should be sent to Ilford, Ltd., or myself.

R. A. PALGRAVE,
4 High Street, Much Wenlock,
Shropshire

Margins and Sales

SIR,—In replying to Mr. K. F. Hodder's letter (*C. & D.*, January 4, p. 22) I would say that when, in 1952, we introduced the two-roll pack of Andrex toilet tissue, Andrex was still a comparatively small-selling line. In order to support the trade through the introductory period of the two-roll pack we offered an *extra* percentage profit margin on the pack. In those early days the two-roll pack was selling at 2s. 5d. (single roll 1s. 3d.) but, despite the *extra* profit margin, it was not until the price was reduced to 2s. 4d. in 1954 that the two-roll packs really began to increase their sale. In making the reduction to 2s. 4d. we still gave to the trade that extra margin. Since 1954 there has, of course, been a rapidly increasing sale, not only for the two-roll packs of Andrex, but also for the single packs, both in white and in colour. As was stated in our advertisement in the *C. & D.*, December 28, 1957, the alteration in the trade price of the two-roll pack had the effect of bringing the margin on the two-roll and single packs more in line with each other than previously. We have, as will have been noted, made no alteration at all to the single-pack margin. In reply to Mr. Hodder's second point, I would point out that Andrex is not currently being advertised on television. I could say a lot about the development in the sales of toilet rolls through chemist outlets during the past few years, and the position that Andrex bears in that respect, but those are points which, perhaps, need not be mentioned, as the readers of your paper are the very people who will know the facts from their own experience.

BOWATER-SCOTT CORPORATION, LTD.,
R. G. LAGDEN, *General Sales Manager*,
London, W.1.

Assistants in Dispensing

SIR,—May I put forward the following minimum requirements for the acceptance of any examination for assistants in dispensing:—

1. A high standard of education, plus an entrance examination.
2. Registration with the Pharmaceutical Society.
3. Three years' apprenticeship.
4. Part time attendance at a technical College or evening classes during apprenticeship.
5. To take during the three years a correspondence course (run by the Pharmaceutical Society) in pharmaceutical general knowledge or business principles.
6. To take the St. John Ambulance Association or British Red Cross Society or Civil Defence course in first aid.
7. One apprentice only to any one pharmacist.
8. The examination to be passed within six years (failure to involve not being allowed to continue as unqualified labour in a chemist shop).
9. A ban on conducting or opening a drug store or pharmacy on their own account or as a limited company.
10. The opportunity to continue studies so as to qualify as a pharmaceutical chemist (and a fund to be set up to help students to do so).
11. Rates of pay during "apprenticeship" controlled by the Ministry of Health, the Pharmaceutical Society, the National Pharmaceutical Union and a body of registered apprentices.
12. Total registration of apprentices not to exceed 1,000 in any one year (with a "sliding scale" issued by the Society every year).
13. Registration in four quarterly periods (commencing January 1, April 1, July 1 or October 1).
14. A compulsory fee of £10 10s. per annum during continued registration as assistant in dispensing.
15. Assistants to be subject to the ethics of the Society.
16. No unqualified labour to be allowed to assist in the dispensing, compounding, filling of prescriptions, or packing and making up of drugs and medicines.
17. No "assistant in dispensing" to be allowed to practise after reaching sixty-five years of age.
18. All assistants at present in chemists shops to be allowed to sit for the examination up to 1960 (after that date to need to register for an indentured apprenticeship of three years).

F. W. ROBINSON,
Bolton, Lancs

Seeking Information

SIR,—Since coming to England from Australia to write an academic thesis about trends in the British pharmaceutical profession, I have received much valuable help and information from officials of the Pharmaceutical Society and the National Pharmaceutical Union, as well as from a large number of individual pharmacists. However, far too little is known about how the changes in the educational and social systems in this country are affecting the type of people being recruited into pharmacy, the extent to which they move from one branch of the profession to another, and how they see themselves in relation to other groups. As an Australian, I am particularly interested, because pharmaceutical education "Down Under" tends to follow the British pattern. In a postal questionary which I am sending to a large sample of British pharmacists on the Register (including some who are in industry or retired), I am asking for information on such matters as the above, and also for opinions on questions such as the registration of unqualified assistants and other topics of pharmaceutical interest. Obviously the more complete the response the more reliable will be the conclusions. May I thank those pharmacists who have already returned answers to my questions, sometimes enclosing encouraging letters. Completed forms will be welcome at any time, but it would help if recipients could let me have them back within ten days of receiving them.

GEORGE LANDERS,
8 Leinster Square, London, W.2

CANOPIED AGAINST THE CORNISH SUN

Ingenious construction at a Newquay pharmacy

TWO adjoining shop premises at Newquay, Cornwall—Nos. 17A and 17B Cliff Road—were recently converted into a single modern pharmacy. The proprietor (Mr. H. C. Gillis, M.P.S.) employed no architect. With a friend (Mr. A. J. Pearce) who is a local building contractor, he drew up the plans, his friend carrying out the work. Outstanding feature of the construction is the shopfront, justly claimed to be "something different" in design.

Mr. Gillis acquired the premises privately in August 1956. As they adjoined his pharmacy at 15 High Street he was able to keep a constant watch on building progress. Time was of no great consequence, and Mr. Gillis was able to wait for any materials that might be difficult to obtain, or for which delivery was slow.

The new pharmacy is 25 ft. wide and 30 ft. deep, with 6- x 28-ft. storeroom attached. The foundations have been laid for a 30-ft. extension at the rear, notwithstanding that the store has already been enlarged by 6 x 14 ft. To make the two shops into one, two 18-in. x 30-ft. steel joists were placed beneath the old steel joists of the smaller shops. The whole was supported in three positions by upright stanchions of latticed steelwork, its bottom plates embedded in 3 ft. of concrete. The positions chosen were at both ends of the joists and in the pillar of the side entrance. To carry a gable wall, estimated to weigh 50 tons, between the two shops, a stone pier was retained. The remainder was carried by steel joists, again supported on a steel lattice. One of the joists was placed to come just behind the main shop doors, clear of the window back. It is almost unnoticeable.

The low position of the new girders was chosen so as to give "seating" for a canopy jutting out 7 ft. over the forecourt. To windows that face due south into open sky, the canopy gives complete protection from the sun during all the summer months. "We had measured the sun's angles at various times and were quite confident of the result, though our views were not shared by many locals," comments Mr. Gillis.

Of Interest to Builders

Final measurements of the two windows were 5 ft. high and 8 ft. 9 in. wide each. In the shop itself the low placing of the girders gives a clean wall above the windows, the base of the girders forming the top of the windows. Combined with sliding doors in the window backing, it gives a clean appearance and there is no dirt-trap above the windows. "Many builders, visitors to Newquay, have made inquiries about this method of fitting," says Mr. Gillis.

The shop front and side door are in teak, the edge of the canopy in a sparkling red glass with golden lettering fixed into the back. The bases and ceilings of the windows are of cream Hardec (a plastic-faced chip-board) and each window is fitted with a 5-ft. fluorescent tube. Each window has six power points for plugging-in manufacturers' signs or other equipment. The shop itself is lighted by eight 5-ft. fluorescent tubes (without shades) hanging from the ceiling. The effect is brilliant and neat. Lights are also set in the canopy overhanging the forecourt.

The flooring of the shop interior is of Marley tiles, one red to six light buff. The door area is covered in red quarry tiles taken in as far as the limit of the open doors (instead of to the usual line of the closed doors). The forecourt (an area of 30 x 25 ft.) is finished in red-tinted cement. The external walls of the building are finished in Snowcrete.

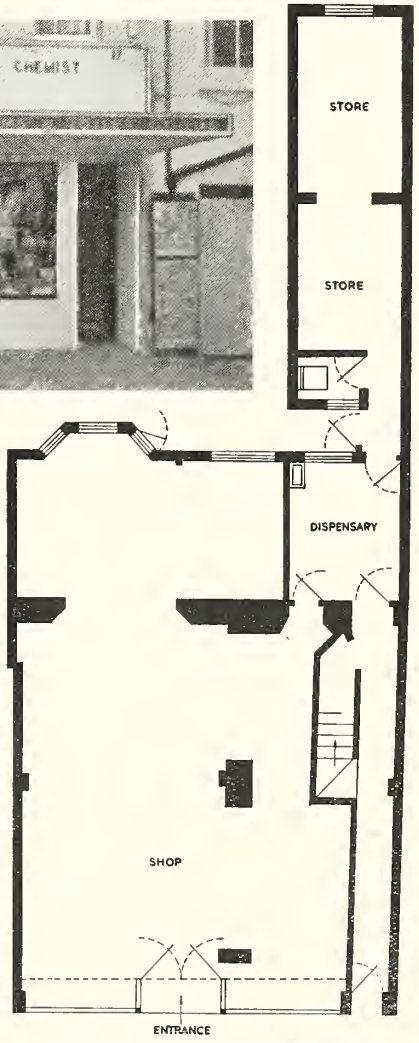
A separate goods run was arranged through to the store and the staircase to two upstairs flats was carried over it (at the side of the shop). The passage was so high that a false ceiling was put into it, with cupboard doors above the shop fittings, gaining about 12 x 4 ft., a space sufficient to hold in perfect condition all the reserve stock of labels, bags and general stationery.

The pharmaceutical business for which this handsome home has been provided was founded in the nineteenth century. Mr. Gillis served his apprenticeship in it, qualifying in 1934 from Chelsea Polytechnic, London (he gained both parts in five terms). In 1933 the business was transferred to its present location from the older part of Newquay. In fitting out the new premises, Mr. Gillis was able to draw on accumulated "bits and pieces" from the premises at 15 Cliff Road, as they were in good condition and "reasonably modern." Most of them are of solid mahogany, and it was decided that the new fittings should contrast with them. Made by Mr. Pearce, the new fittings include shelving of parana pine stained to a mahogany finish, with the edges brought out in contrast with light-oak square-edging uprights and half-round edges. One run of shelves (22 in. deep, 11 ft. high and 11 ft. wide) is devoted to surgical dressings, sanitary towels, etc. A section is backed with 1-in segment mirror-glass.

The placing of the showcases keeps the whole of the centre floor clear, with a serving counter in each of three corners of the shop and another across the back. Each counter has its own cash register. A corner bench with a surface area of about 8 x 2 ft. was fitted for marking and checking goods.

The dispensary is fitted with four glass-fronted cupboards for small stock, three poisons cupboards, and the usual runs of shelving. The working benches are covered with Formica laminated plastic. The equipment includes a gas cooker and hot water over the sink is provided by a 3-gall. electric heater.

The staff cloakroom has a 1-gall. heater at its wash-hand basin and a coat-hanging space has been provided with a 250-watt clothes airer because some of the staff (in addition to Mr. Gillis and his wife, four assistants are employed) have to travel about twelve miles to work.

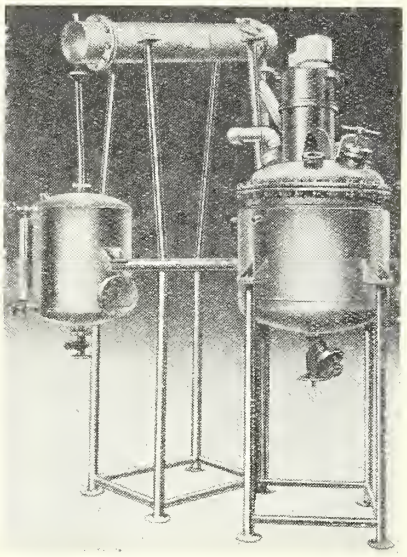


Above: the layout of the premises showing the extended store; top left, the imposing facade of the pharmacy.

MACHINERY AND PLANT

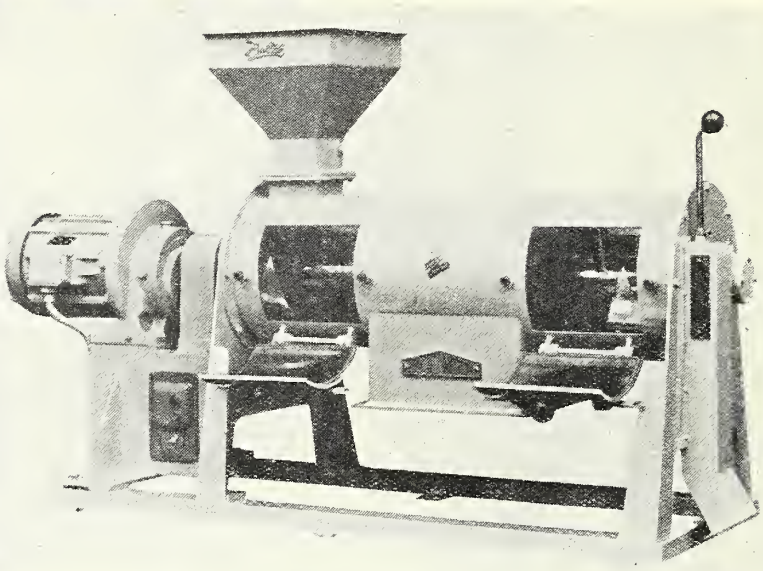
Sample Mill. — It is claimed that small samples (under 100 c.c.) may be quickly and easily ground with the portable electric laboratory sample mill made by Glen Creston, Ltd., 41 Church Road, Stanmore, Middlesex.

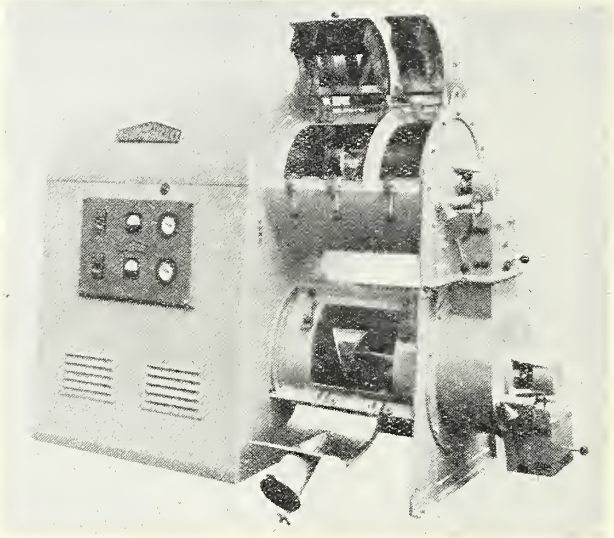
Plants for Special Needs.—T. Giusti & Son, Ltd., 210 York Way, London, N.7, have extended their production of stainless-steel equipment, manufactured to customers' requirements. The company have reorganised their schedules to standardise on production models, preserve stocks of stainless steel and speed output of special lines. Among "made-to-measure" items are those used in pilot plants, such as bench tilting pans, reaction vessels and heat exchangers, which are now being combined in matched, high efficiency units.



A typical pilot distillation unit (shown above) is supplied to meet specific requirements, and is designed to handle alcohol, oils, pharmaceutical products, chemicals and for solvent recovery. The units comprise a heated still, geared anchor type agitator, heated column, shell and tube condenser, reflux divider and receiver. All are mounted on tubular steel frames forming a compact and self-contained unit. Plant can be provided complete with instrumentation and vacuum pump, etc.

Spiral-drive Agitator Mechanisms.—Stockdale Engineering, Ltd., Poynton, Ches, are now manufacturing a new range of agitator drives which are the first gear units to be designed and manufactured in Great Britain expressly for driving both vertical and side - entering, permanently - mounted agitators. The new drives have an oversize output shaft which has supporting bearings spaced at wide centres. For the horse power for which a given size of drive is designed to transmit, the output shaft is approximately 50 per cent. larger in diameter than a similar shaft in a typical standard gear unit, and the bearing centres are more than 50 per cent. greater than on a standard gearbox. That results in a drive which can be direct coupled to an agitator shaft of considerable unsupported length. The drives are suitable for installation both on open tanks and vats, and closed pressure vessels, and can be used on tanks up to 20 ft. deep. The output speed of the drive can be changed easily as there is a wide range of spare helical gears. The new drives offer high gear efficiency, dry-well lubrication and they do not leak. They can be supplied either with or without agitator shafts or paddles or turbines. Any existing motor may be used.



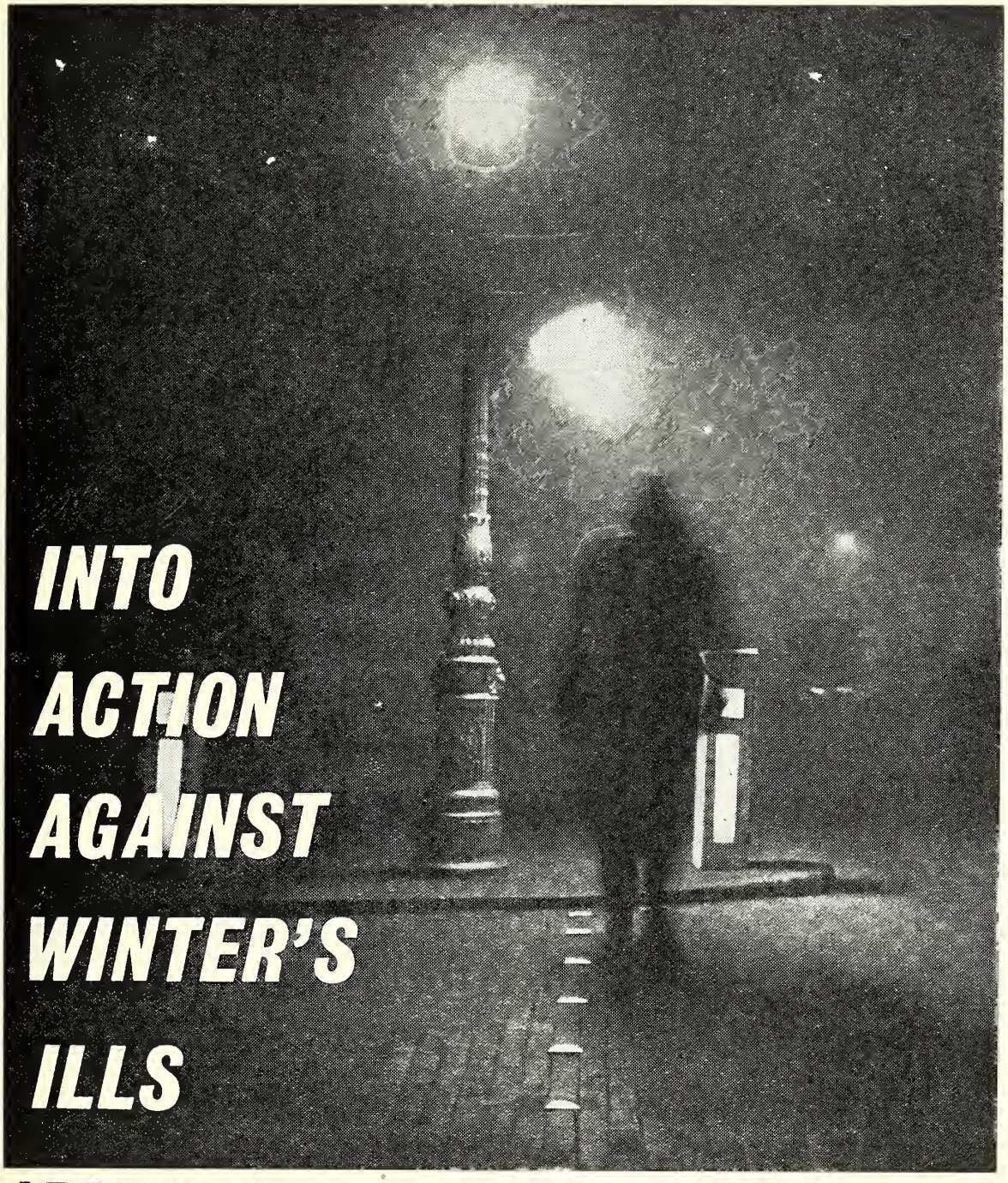


MIXING MACHINES: Right, an FKM.150.DK mixing machine manufactured by the Morton Machine Co., Ltd., Wishaw, Lanarks.

Above, A K M . 7 0 . D Lödige-Morton continuous mixer manufactured by Messrs. Morton Machine Co.

Multi-purpose Equipment.—Bowser, Monks, & Whitehouse, Ltd., Enterprise Works, Spring Gardens, Doncaster, Yorks, are suppliers of the Erweka Lab-master, multi-purpose laboratory equipment. The equipment consists of a basic master driving unit to which can be attached a complete range of accessories, each forming with the basic unit, a self-contained machine. The range of machines that can be set up include a laboratory roll mill, homogeniser, agitator, mixer and kneader, suppository manufacturing unit, bottle-shaking machine, ball mill, vibration table and sieve, tablet-making machine, tincture press, coating basin, dry and wet granulators, and mincer. Using the basic unit and each accessory a complete range of manufacturing processes can be reproduced in the laboratory. Small batch production is, it is understood, possible on the equipment to the same standard as is achieved on much larger equipment.

Bottle Cleaning. — Among bottle cleaning equipment manufactured by the Thomas Hill Engineering Co. (Hull), Ltd., 247 Beverley Road, Hull, Yorks, is the Grangemouth sixty-bottle rinser for rinsing new bottles, giving outputs up to 240 doz. bottles per hour; the Grangemouth twenty-four-bottle rinser for rinsing new bottles, giving outputs up to 120 doz. bottles per hour; the Olympian bottle-cleaning machine (soak, brush and rinse type) model G, giving outputs up to 50 doz. per hour (other models available for outputs up to 240 doz. per hour). The company's brushing machines include the Wasp, Swift and Surgic.



ADEXOLIN

TRADE MARK

concentrated vitamins A. & D. A course of Adexolin will pleasantly and conveniently help your customers to withstand the rigours of winter. It is not a short term fillip but fortifies the body's natural defence mechanisms.

Adexolin Packs and Prices. Capsules 25 18/- per doz. 100 54/- per doz. 1000 27/- each
Liquid ½ oz. 20/3 per doz. 2 oz. 47/3 per doz. 16 oz. 22/6 each
Display Parcels No. 1 Capsules 2 doz. x 25's tins £1.12.0 net
No. 2 Capsules 1 doz. x 100's tins £2.8.0 net
No. 4 Liquid 2 doz. x ½ oz. bottles £1.16.0 net
No. 5 Liquid 1 doz. x 2 oz. bottles £2.2.0. net

COMPLAN

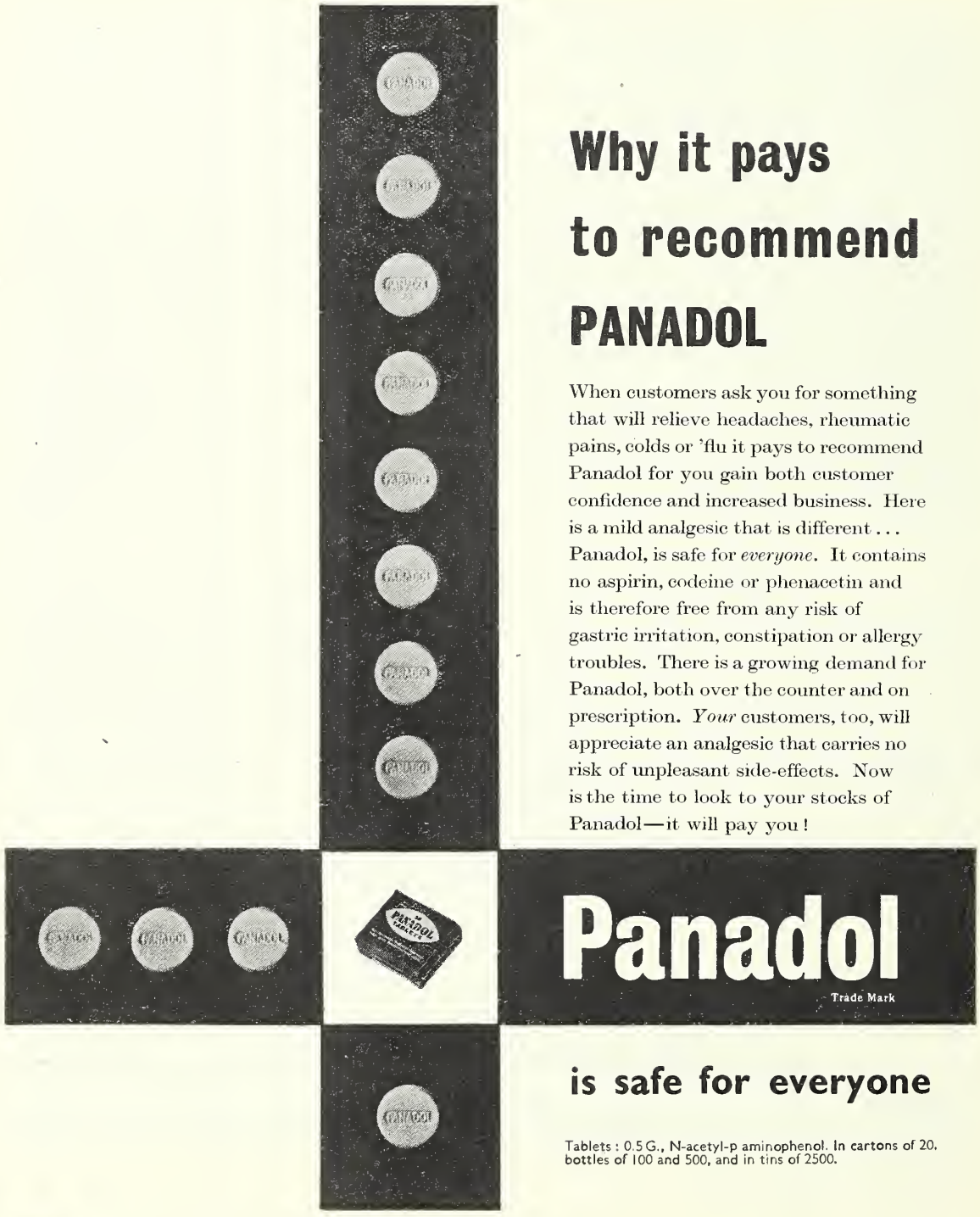
TRADE MARK

the complete food. Complan nourishes completely the sick patient unable or unwilling to eat solid food. Light but sustaining, it is speedily prepared and simple to digest.

Complan Packs and Prices 1 lb. carton 40/- per doz.
No. 1 Parcel 2 doz. x 1 lb. cartons £3.15.0.

GLAXO

GLAXO LABORATORIES LTD., GREENFORD, MIDDLESEX BYRon 3434
Subsidiary Companies or Agents in most countries



Why it pays to recommend PANADOL

When customers ask you for something that will relieve headaches, rheumatic pains, colds or 'flu it pays to recommend Panadol for you gain both customer confidence and increased business. Here is a mild analgesic that is different... Panadol, is safe for *everyone*. It contains no aspirin, codeine or phenacetin and is therefore free from any risk of gastric irritation, constipation or allergy troubles. There is a growing demand for Panadol, both over the counter and on prescription. *Your* customers, too, will appreciate an analgesic that carries no risk of unpleasant side-effects. Now is the time to look to your stocks of Panadol—it will pay you!

Panadol
Trade Mark

is safe for everyone

Tablets: 0.5 G., N-acetyl-p aminophenol. In cartons of 20, bottles of 100 and 500, and in tins of 2500.

BAYER

Bayer Products Limited
Kingston-on-Thames, Surrey
Associated exporting company: Winthrop Products Ltd.

No. 120

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essentital oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, JANUARY 15: Apart from minor price adjustments in exsiccated SODIUM CARBONATE, and MAGNESIUM and AMMONIUM CHLORIDES, the only price change of note among PHARMACEUTICAL CHEMICALS during the week was that of ZINC OXIDE, which advanced £3 per ton on January 13.

Among industrial solvents DIBUTYL and DI-ISOBUTYL PHTHALATES were reduced by a principal manufacturer. A Customs duty of 4s. per lb. has been imposed on SILICONES coming into the country from a specified French producer (see p. 56). The price of material from that source has been competitive with, though not below the price of, silicones from British manufacturers. MERCURY was up £2 per flask.

Buying interest in most CRUDE DRUGS was lacking, and the market provided no important features. New-crop BUCHU came on offer for the first time the price quoted for round leaves being 6s. 9d. per lb., c.i.f. Chinese MENTHOL was held at previous levels, but Brazilian material was lower by sixpence per lb. for shipment. PODOPHYLLUM *Emodi* is scarce on the spot, and holders are asking 30s. per cwt. above recent levels for their remaining stocks. Meanwhile it is difficult to obtain firm offers for shipment. CASSIA BARK appears to have been cleared on the spot, and since origin has not been offering for some time it would appear that another four months must elapse before any supplies can be expected. The shipment position of white Sarawak PEPPER has shown an easier tendency. CLOVES were lower at origin.

Prices of ESSENTIAL OILS were steady with buying confined to small lots for immediate requirements. The fact that GERANIOL can now be produced synthetically at a price and quality said to be competitive with that obtained from natural oils (*C. & D.*, January 11, p. 36), will undoubtedly affect those essential oils hitherto employed for its preparation.

Pharmaceutical Chemicals

AMIDOPYRIN.—Minimum rate is 23s. 1d. per lb. with usual differentials for small lots.

AMMONIUM ACETATE. — 1-cwt. lots of B.P.C., 1949, are quoted at 4s. 5d. per lb.

AMMONIUM CHLORIDE.—Makers quote 1-cwt. lots of B.P. powder at 82s. 6d. per cwt. with extra pure crystals at 126s.

AMYLOBARBITONE. — B.P.C. is 77s. 6d. per kilo for minimum 25-kilo lots and SODIUM, B.P.C., 87s. 6d. per kilo.

ANEURINE HYDROCHLORIDE. — Price per kilo is now £15 3s. 6d. with 10-kilo lots at £14 18s. 6d. per kilo.

BARBITONE.—Rate for less than 50-kilo lots is 53s. 6d. per kilo. The SODIUM derivative is 56s. 9d. per kilo.

BISMUTH SALTS.—The following are the prices (per lb.) in largest bulk packages:—

	28 lb. to 1-cwt.	1-cwt.	5-cwt.
	s. d.	*s. d.*	*s. d.*
CARBONATE ..	22 3	21 9	21 4
SALICYLATE ..	21 9	21 4	20 10
SUBGALLATE ..	21 1	20 8	20 2
SUBNITRATE ..	20 5	20 0	19 6

The 1-cwt. rates (per lb.) for other salts are:—CITRATE, B.P.C., 22s. 8d.; NITRATE, crystal, 14s. 8d.; OXIDE, B.P.C., 27s. 7d.; OXYCHLORIDE, B.P., 27s. 9d.; OXYIODOGALLATE, B.P.C., 28s. 9d.; SODIUM TARTRATE, 35s. 6d.; and TRIBROMPHENATE, B.P.C., 26s. 9d.

BRUCINE.—ALKALOID in 100-oz. lots is 2s. 1d. per oz. and NITRATE and SULPHATE, 1s. 10d. per oz.

BUTOBARBITONE. — B.P.C. is 92s. 6d. per kilo in minimum 25-kilo lots. SODIUM salt is 102s. 6d. per kilo.

CALAMINE.—1-cwt. lots are 2s. per lb.; 5-cwt., 1s. 9d.; 1 ton, 1s. 8½d.

CALCIUM CARBONATE. — B.P. light-precipitated powder is £31 per ton, ex store.

CALCIUM CHLORIDE. — B.P. crystals are 1s. 3½d., and granulated, 10½d. per lb. in 1-cwt. lots.

CALCIUM SUCCINATE. — Quotations are from 10s. 6d. to 12s. 6d. per lb., as to quantity. SUCCINIC ACID is from 10s. 6d. to 12s. 3d. per lb.

CARBROMAL. — B.P.C. is 21s. per lb. delivered in returnable packing.

CHLORAL HYDRATE. — In 1-cwt. lots the price is about 4s. 3d. per lb.

CINCHOPHEN.—1-cwt. lots are quoted at 21s. per lb.

CITRIC ACID. — Quotations (per cwt.) for domestic material are 225s. for 1-4-cwt. lots and 220s. for 5-cwt. lots.

COCAINE.—For 16-oz. lots the price of the HYDROCHLORIDE is 91s. 6d. per oz. and ALKALOID, 101s. Subject to D.D.A. regulations.

CYCLOBARBITONE. — B.P.C. in 25-kilo lots or over is 82s. 6d. per kilo.

ETHER.—Prices (per lb.) in winchesters are as follows:—TECHNICAL, B.S.S., and SOLVENT, 5-cwt., 2s. 7d.; (4s. 1½d. litre). In drums the price is 2s. 2d. per lb. ANÆSTHETIC, B.P., 5-cwt., 3s. 10d.; 10-cwt., 3s. 9d.

GLYCERIN. — Rates for pharmaceutically pure are as follows:—

Annual purchases or spot lots of	Under 1-cwt.	1-cwt. and under 5-cwt.	5-cwt. and under 1 ton	1 ton and under 5 tons	5 tons and under 25 tons
Per cwt.	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*
TINS					
14-lb.	241 0	236 6	232 6	228 0	225 6
28-lb.	239 0	234 6	230 6	226 0	223 6
56-lb.	235 0	230 6	226 0	222 0	219 6
DRUMS					
1-cwt.	—	214 6	210 6	206 0	204 6
2½-cwt.	—	211 6	208 0	203 6	202 0
5-cwt.	—	—	207 6	203 0	201 6
10-cwt.	—	—	206 0	202 6	201 0

For 25 tons and upwards the price is from 200s. to 225s. 6d. as to containers. Bulk deliveries in tank wagons from 197s. 6d. to 198s. 6d. Pale straw industrial glycerin, s.g. 1·260, is 5s. per cwt. less than the above.

HEXOBARBITONE. — In 25-kilo lots the price is 115s. per kilo. SODIUM SALT is 125s.

HOMATROPINE.—Current rates (per oz.) for 16-oz. lots are now: ALKALOID, 30s. 6d.; HYDROBROMIDE, 24s. 6d.; HYDROCHLORIDE, 28s. 6d.; METHYLBROMIDE, 25s. 6d. 1-oz. rates are 1s. 6d. per oz. above those rates.

HYDROGEN PEROXIDE.—Carboy lots of 20 vols. are 5s. per gall. The 35 per cent. (by weight) is 158s. per cwt. in 1-cwt. carboys.

IRON SALTS. — GLUCONATE, B.P.C., is 6s. 6d. per lb. in 1-cwt. lots; SULPHATE, B.P. crystals are 9d. per lb. in 28-lb. lots; 1-cwt. is 55s. per cwt. and 5-cwt., 50s. per cwt. Granulated and pea crystals are 2s. 6d. per cwt. more; SULPHATE EXSICCATED is 1s. 5d. per lb. for 28-lb., 1-cwt. 118s.; 5-cwt., 113s. per cwt., 1-cwt. fibre kegs free. Other packages extra. PHOSPHATE, SACCHARATED, B.P.C., 28-lb. lots are 3s. 7d. per lb. OXIDE, RED PRECIPITATED, B.P.C., 1949, 1-cwt., 2s. 1d. per lb.; CARBONATE, SACCHARATED, B.P.C. 1949, 28-lb., 3s. 1d.; 1-cwt., 2s. 10d. AMMONIUM SULPHATE, 1-cwt., 1s. 7d. per lb. QUININE CITRATE, 2s. 1d. per oz. in 100-oz. tin.

LEAD ACETATE. — B.P. crystals are 200s. per cwt. and technical, 180s.

MAGNESIUM CARBONATE.—Minimum bulk rate for LIGHT is 121s. per cwt.; HEAVY is 160s. per cwt. for 5-cwt. lots and about 130s. per cwt. for 1-ton lots, delivered U.K.

MAGNESIUM CHLORIDE.—One-cwt. lots are quoted at 1s. 10d. per lb.; 5-cwt., 1s. 7d.

MAGNESIUM OXIDE, B.P.—Bulk rates are as follows:—LIGHT, 3s. 3d. per lb., and HEAVY, 5s. 10d. per lb.

MAGNESIUM PEROXIDE. — Price (per lb.) for 1-cwt. lots of B.P.C. (15 per cent.) is 3s. 11d.

METHADONE HYDROCHLORIDE. — Price is from 2s. to 2s. 6d. per gm. as to quantity. Subject to D.D.A. regulations.

METHYL PHENOBARBITONE.—B.P. is 90s. per kilo in 25-kilo lots.

PARAFFINS. — Prices to wholesale distributors are:— *Liquid:* HEAVY, B.P. £107 17s. 6d. per ton; LIGHT, B.P. £87 15s.; *Technical White oils*, £79 5s. for the LIGHT and £92 15s. for the MEDIUM, all in 40-50 gall. returnable loaned drums, delivered U.K. *Soft:* WHITE, medium consistency is now £110 15s. per ton. WHITE, soft consistency, £107 7s. 6d., and YELLOW, £88 10s. all B.P., in non-returnable drums delivered.

PENTOBARBITONE SODIUM. — Minimum 25-kilo lots are 125s. per kilo.

PETHIDINE HYDROCHLORIDE.—B.P. 100-gm. lots, 100s. Subject to D.D.A. regulations.

PHENAZONE. — Imported material minimum rate, 14s. 8½d. per lb.

PHENOBARBITONE. — Under 25-kilo lots are 52s. 3d. per kilo and SODIUM, 55s. 6d.

PHENOL.—Basic price for ice crystals in drums is 1s. 4½d. per lb. (under 1-ton lots, 1s. 7½d.). Detached crystals, 2d. per lb. above and LIQUID, B.P., ¾d. per lb. below the foregoing basic prices.

PHENOLPHTHALEIN.—Rate for 1-cwt. lots is 11s. per lb.

SULPHACETAMIDE. — Quotations (per lb.) for 1-cwt. lots are 24s. 6d. The SODIUM DERIVATIVE is 30s.

SULPHAGUANIDINE.—Manufacturers' rates for 1-cwt. lots are about 11s. per lb.

SULPHANILAMIDE.—Manufacturers' rates for 1-cwt. lots are 5s. 9d. per lb.

SULPHATHIAZOLE. — Price (per lb.) for 1-cwt. lots is 16s. 6d.

TARTARIC ACID. — Rates for the home trade are as follows:—10-cwt. lots, 280s. per cwt.; 5-9-cwt., 282s.; 2-4-cwt., 284s.; 1-cwt., 285s.

ZINC OXIDE.—Dearer by £3 per ton. Rates for B.P. quality are now: 2-ton lots, £100 10s. per ton; 1-ton, £101 10s.; 5-cwt., £108 10s.

Crude Drugs

ACONITE. — Spot supplies of Spanish *napellus* are 3s. per lb., duty paid.

AGAR.—*Kobé* is 12s. 3d. per lb., duty paid. New-crop for January-February shipment, 10s. 4d., c.i.f.

ALOES. — Cape prime for shipment is about 207s. 6d. per cwt., c.i.f. and spot, 230s. Curaçao unobtainable.

BALSAMS.—Quotations (per lb.) are:—CANADA: Spot, 25s. 6d. to 26s. and shipment, 25s., c.i.f. COPAIBA. Para from 7s. 9d. to 11s. duty paid. PERU cleared on the spot and shipment not offering. TOLU (genuine as imported), 25s. 6d.; B.P., not offering.

BENZOIN.—Sumatra No. 1 block on the spot is £26 to £27 (£23 10s., c.i.f.), and No. 2, £20. Almonds (Sumatra), best grades are difficult to obtain at origin; spot, 18s. 6d. per lb.

BUCHU.—Spot rounds are 7s. 9d. per lb.

CALAMUS. — Dutch root is quoted at 1s. 4d. per lb., c.i.f.

CAMPHOR.—B.P. POWDER is from 5s. 3d. per lb., duty paid. TABLETS, ¼-oz. are 5s. 9d., c.i.f., and 6s. in bond.

CAPSICUMS. — East African are from 120s. to 200s. per cwt. on the spot.

CARDAMOMS. — Aleppy greens are 16s. per lb. on the spot; shipment, 14s., c.i.f. No. 1 seed 24s. 6d., spot; shipment, 21s. 6d., c.i.f.; split seed, 17s.

CASCARA SAGRADA.—Spot 1956 processed peel is 320s. per cwt., duty paid, and 1957 peel, from 285s.

CASSIA BARK. — Selected and broken are cleared on the spot. No shipment offers.

CHERRY BARK. — Thin natural is from 1s. 9d. per lb., duty paid, and rossed 2s., on the spot.

CHILLIES.—Mombasa on the spot are 210s. per cwt.; shipment, 160s., c.i.f.

CINNAMON.—Ceylon for shipment (c.i.f.) per lb., OOOO, 7s. 8d.; OOO, 7s. 5d.; OO, 7s. 3d.; seconds, 6s. 2d.; featherings, 2s. 2d.; quillings, 4s. 9d.; chips, 10½d.

CLOVES. — Zanzibar on the spot are quoted at 3s. 4d. per lb. Shipment, 2s. 10d., c.i.f.

COCHINEAL. — Silver - grey Peruvian 9s. 6d. per lb. Canary Isles black-brilliant, 28s. 3d.

COCILLANA.—Bark is 1s. 11½d. per lb. on the spot.

COLOCYNTH PULP. — Spot, 4s. per lb., duty paid.

DIGITALIS LEAF.—Purpurea (1956 crop), is offered at 1s. 2½d. per lb., c.i.f.; 1957 crop, 2s. 6d. to 2s. 7d., c.i.f.

ERGOT.—Portuguese is 5s. 6d. per lb. c.i.f., for prompt shipment and 6s. spot. American, 5s. 9d., spot; Hungarian, 7s. 9d.

GENTIAN. — French on the spot is quoted at 180s. per cwt.

GINGER.—African, 120s. per cwt. on the spot; shipment, 110s. Jamaican No. 3 on the spot is 535s. per cwt. Cochin spot, 110s.

GUM ACACIA.—Kordofan cleaned sorts are 137s. 6d. per cwt. on the spot; prompt shipment, lower at 124s. 6d., c.i.f.

HENNA.—Indian is 75s. per cwt. on the spot.

HYDRASTIS. — Spot 31s. per lb.; forward, 31s. 6d. per lb., c.i.f.

HYOSCYAMUS.—Dutch leaves (*niger*), are 1s. 6½d. per lb., c.i.f., prompt shipment.

IPECACUANHA.—Colombian on the spot offered at 66s. per lb. Matto Grosso, February–March shipment, 58s. per lb., c.i.f. Costa Rican (limited supplies), 74s., c.i.f.

JALAP ROOT. — Mexican, afloat or shipment, testing 15 per cent., is 5s. 1d. per lb., c.i.f.

KARAYA. — No. 1 gum on the spot is quoted at 245s. per cwt. and No. 2 at 170s.

LOBELIA HERB. — Spot offers are from 4s. 9d. to 5s. 3d. per lb. Dutch for shipment, 4s. 3d., c.i.f.

MACE. — Whole on the spot is from 23s. 6d. per lb.

MENTHOL.—Chinese is 53s. per lb., duty paid and 48s. 6d., c.i.f.; Brazilian spot, 41s., duty paid, shipment, 37s. 6d., c.i.f. Formosan, 45s., c.i.f., Japanese, 46s. 6d., c.i.f., January.

MERCURY. — Price per flask (76-lb.) is £71 on the spot.

NUTMEGS.—West Indian 80's, 17s. per lb. on the spot. Sound unassorted, 14s. 6d.

ORANGE PEEL. — West Indian bitter quarters are 1s. per lb.; Spanish, 1s. 9d.; thin-cut Tripoli, 2s. 3d.

ORRIS ROOT. — Florentine is 340s. per cwt.

PAPAIN. — Nominal c.i.f. value of No. 1 white is 32s. 6d.

PEPPER. — White Sarawak is 2s. 1½d. per lb. on the spot and shipment offering at 1s. 11¾d., c.i.f. Black Sarawak, 1s. 6d., on spot and shipment at 1s. 5d., c.i.f. Black Malabar on spot is 200s. per cwt. nominal and new crop for January–February shipment, 177s. 6d.

PEPPERMINT LEAVES. — Dutch new-crop for shipment, 2s. 9d. per lb., c.i.f.

PIMENTO.—Spot is 510s. per cwt.; shipment, 540s., f.o.b.

PODOPHYLLUM.—*Emodi* is 160s. per cwt., c.i.f. and 175s., spot. *Peltatum*, 3s. 10½d. per lb., spot, and 400s. per cwt., c.i.f., for shipment.

QUASSIA. — Spot cleared, no shipment offers.

SARSAPARILLA.—Jamaican native red on the spot is 2s. 6d. per lb.

SEEDS. — (Per cwt.). ANISE.—Cyprian quoted at 167s. 6d., spot, duty free. CARAWAY.—Dutch 95s., duty paid. CELERY. —Indian firm on spot at 200s.; new-crop for May–June shipment sold at 130s., c.i.f. CORIANDER.—Moroccan quoted at 75s. and Polish splits, to arrive, 52s. 6d., both duty paid. CUMIN.—Cyprian, 200s., spot; Iranian, 175s., in bond. Cyprian for shipment quoted at 180s., c.i.f. DILL.—Indian reported selling in small quantities at 65s., spot. FENNEL.—Indian 195s., spot; shipment (old crop) 157s. 6d., c.i.f. FENUGREEK.—Moroccan on spot 55s., duty paid. MUSTARD.—English 65s. to 80s. according to quality.

SENEGA.—Spot is 17s. 9d. per lb. with shippers asking 17s. 3d., c.i.f.

SENNA. — *Tinnevelly* LEAVES, prime No. 1, 1s. 5d. per lb., prime No. 2, 1s. 3d., f.a.q., No. 3, 10d. PODS, manufacturing scarce at 1s. 6d.; others, 1s. 7d. to 2s. 3d. *Alexandria* pods; Manufacturing, limited stocks at 1s. 6d. with hand-picked from 3s. 6d. to 8s.

SQUILL.—New-crop white is offered on the spot at 70s. per cwt.

STRAMONIUM.—Indian LEAVES are 70s. per cwt., and European 80s. on the spot.

STROPHANTHUS.—*Kombé* on the spot is 8s. 6d. per lb. for the 100 per cent.; *Gratus* is unobtainable spot or forward.

TURMERIC.—Madras finger on the spot is firm at 55s. per cwt. New-crop (April–May) quoted at 53s. to 53s. 6d., c.i.f.

WAXES. — (Per cwt.). BEES'.—Dar-es-Salaam, spot, 505s., shipment, 485s., c.i.f.; Sudanese, 450s., spot, in bond and 440s., c.i.f. Abyssinian, spot, 470s. in bond; shipment, 445s., c.i.f. Benguela spot, 530s., duty paid; shipment, 495s. c.i.f. CANDELILLA. — Spot, 460s. CARNAUBA.—Fatty grey, spot, 565s.; for shipment, 540s., c.i.f. Prime yellow, spot, 1,110s.; shipment, 1,025s., c.i.f.

Essential and Expressed Oils

ALMOND. — British oil is 8s. 3d. per lb. Moroccan, 7s. 6d., in bond.

AMBER.—Rectified on the spot is 1s. 6d. per lb.

ANISE. — Chinese, 11s. per lb., spot: shipment, 10s. 10½d., c.i.f.

BAY. — West Indian is 12s. 6d. per lb. on the spot.

BERGAMOT.—Spot supplies are from 85s. per lb.

BIRCH TAR.—Rectified is about 14s. per lb. in 1-cwt. lots.

BOIS DE ROSE.—Brazilian is 25s. 3d. per lb. on the spot and 23s. 6d., c.i.f.

CADE.—Spanish is 2s. 6d. per lb. for drum lots.

CAJUPUT. — Spot supplies are from 10s. 6d. per lb.

CALAMUS.—Spot quotations are 62s. 6d. per lb.

CAMPHOR, WHITE. — Chinese is 1s. 11d. per lb., in bond.

CARDAMOM. — Price per lb. is from 350s. for English-distilled and from 267s. 6d. to 297s. 6d. for imported.

CASSIA.—Spot is 13s. 6d. per lb.; shipment, 13s. 4½d., c.i.f.

CASTOR. — Minimum charge for home-produced B.P. oil on the spot is £181 per ton naked ex mill.

CEDARWOOD.—1-cwt. lots of American are 5s. 6d. per lb., and Kenya, 4s.

CELERY SEED. — Oil is 95s. per lb. for bulk lots.

COD-LIVER. — B.P. is 11s. 6d. per gall. in charged returnable drums. Veterinary is from 9s. 6d. per gall.

CORIANDER. — B.P. oil is quoted from 75s. per lb.

CUBEB. — Spot supplies are offered at 45s. per lb.

FENNEL.—Spanish sweet on the spot is quoted at 10s. to 12s. 6d. per lb.

GINGER. — English-distilled oil is 185s. per lb. Imported: Jamaican, 167s. 6d.; Chinese, 100s., duty paid.

GRAPEFRUIT.—Jamaican or Floridan is 15s. per lb., spot.

LAVANDIN. — Spot is from 11s. to 14s. 9d. per lb. for original drums.

LAVENDER.—French oil, 40–42 per cent. is from 40s. to 60s. per lb. as to make.

LAVENDER SPIKE. — Spanish is offered from 12s. 6d. to 15s. per lb. on the spot.

PIMENTO. — English-distilled berry is 180s. per lb.; imported, 75s. Rectified leaf, 27s. 6d. per lb. for small lots.

ROSEMARY. — Spanish is firm at 7s. 6d. per lb.

SANDALWOOD. — Mysore offered from 81s. to 87s. per lb. as to source. East Indian, 70s., spot.

SASSAFRAS.—Brazilian is from 3s. 9d. per lb., duty paid.

SPEARMINT.—Offers of U.S.P. grade are from 29s. per lb. on the spot.

TANGERINE.—Spot supplies of best oil are offered at 40s. per lb.

THYME.—Spot is 10s. per lb.

VETIVERT.—Spot is currently at about 90s. per lb.

UNITED STATES REPORT

NEW YORK, JANUARY 14: Redistilled GLYCERIN dropped ⅛-cent to 26⅞ cents per lb. Japanese MENTHOL at $7·10 per lb. was lower by 15 cents while FOLIC ACID fell to 70 cents from $1·20 per gm. LYCOPODIUM added a further 50 cents per lb. to $5 but PERU BALSAM declined 20 cents to $1·30 per lb. In ESSENTIAL OILS, BERGAMOT was boosted 25 cents to $13 per lb.

WORLD TRADE

Indo-Soviet Trade. — The five-year trade agreement between India and the Soviet Union, signed in 1953, has been extended by one year. Trade between India and Russia has increased from a total trade value of 17·5 million rupees in 1953–54 to 324·1 million rupees in 1956–57.

Anglo-Polish Trade Talks.—Negotiations between representatives of the Government of Poland and the Government of the United Kingdom have resulted in the drawing up of quota lists covering United Kingdom exports to Poland and Polish exports to the United Kingdom during 1958 under a three-year trade arrangement signed on December 31, 1956. The new quota lists provide for the export of Polish chemicals, etc., at a somewhat higher level than in 1957.

New Zealand Import Licensing.—Faced with a large overseas trading deficit the New Zealand Government has made all imports subject to an import licence. The year 1956 has been taken as the base for working out quotas for 1958. Licences for prepared drugs and medicine will be issued to importers up to the value of 75 per cent. of the base year. Toilet preparations are cut to 25 per cent. of the 1956 value and so too are cameras although the quota for films is 50 per cent. Amongst the items for which there will be no licences granted are styptic pencils, cod-liver oil and effervescing preparations.

Russia Offers Aid to Ceylon.—The Soviet Union has offered Ceylon technical assistance for expansion of food and natural rubber production and has declared herself prepared to buy rubber on a mutually beneficial basis. The offer was made during preliminary discussions between the Ceylon Government and a Soviet Trade mission which is now carrying on detailed discussions with various ministries on the development and a Soviet trade mission which between the two countries. Expansion of Soviet purchases from Ceylon would depend on Ceylon's ability to buy more goods from the Soviet Union. The development of trade, the mission said, was therefore in the hands of Ceylon as well as the Soviet Union.

U.S. Chemical Imports. — United States chemical industry representatives have joined the groups seeking increased tariff protection against foreign imports. Specifically, the Manufacturing Chemists' Association and the Synthetic Organic Chemical Manufacturers Association have entered pleas for such relief. They were heard at the recent hearings before a Congressional subcommittee investigating international trade policy. The subcommittee heard one voice opposing tariff increases, that of Mr. Thomas D. Cabot, president of Godfrey L. Cabot, Inc., makers of carbon black, who stressed the danger of a policy that would hamper other countries in earning dollars. Although both associations advanced arguments which were in some cases contradictory basically, the objection was that competing countries could produce chemicals at lower prices than American firms, and could undersell the domestic producers even after paying duty.

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

From the "Trade Marks Journal," December 27, 1957

For hormone preparations for internal human use (5)

ADIPONE, 767,118, by Howard Lloyd & Co., Ltd., London, S.W.1.

For medicines for human use (5)

GABAIL, 767,782, by Gabail, Ltd., London.

For pharmaceutical substances for human and veterinary use (5)

PHRENOTROPIN, B767,820, by Imperial Chemical Industries, Ltd., London, S.W.1.

For pharmaceutical preparations (5)

SATARAXOID, 768,100, by Chas. Pfizer & Co., Inc., New York, U.S.A.

For pharmaceutical preparations for the treatment of fungal diseases of the nails (5)

ONYCHOPHYTEX, 768,435, by Wynlit Pharmazeutische Produkte, A.G., Zurich, Switzerland.

For antacid powder prepared for pharmaceutical purposes (5)

Device with words DE WITT'S ANTACID POWDER, 769,643, by E. C. De Witt & Co., Ltd., Croydon, Surrey.

For pharmaceutical preparations for human use (5)

CARDRASE, 770,294, by Upjohn of England, Ltd., Crawley, Sussex.

For preparations for killing plants and destroying animals (5)

GUSATHION, 770,442, by Farbenfabriken Bayer, A.G., Leverkusen, Germany.

For electrical apparatus and instruments and laboratory utensils and parts, all made wholly or partly of ceramic materials (9)

Device with word DEGUSSIT, 766,060, by Deutsche Gold-und-silber-Scheideanstalt vormals Roessler, Frankfort-on-Main, Germany.

For still cameras and optical projection apparatus (9)

SPORTSMAN, 770,534, by Ilford, Ltd., Ilford, Essex.

For photographic apparatus, flashlight signalling apparatus and parts and fittings, etc. (9)

TRAFFIPAX, 770,561, by Robot, Berning & Co., Dusseldorf, Germany.

For labels, wrappers, cartons and packaging materials (16)

CARTOGLASS, 769,567, by Chambon, Ltd., London, W.6.

For plastics in the form of blocks for use when liquefied by heat in dipping articles to form removable weatherproof coatings (17)

PROPAC, 766,177, by Sealanco (St. Helens), Ltd., St. Helens, Lancs.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Monday, January 20

ENFIELD CHEMISTS' ASSOCIATION, Hop Poles, Baker Street, at 7.30 p.m. Mr. O. H. Waller (editor, THE CHEMIST AND DRUGGIST) on "Publishing a Pharmaceutical Periodical."

NOTTINGHAM BRANCH, PHARMACEUTICAL SOCIETY, lecture room, Medico-Chirurgical Society, 64 St. James' Street, at 7.30 p.m. Dr. R. Gwyn Evans on "Some Recent Advances in Endocrinology."

PESTICIDES GROUP, SOCIETY OF CHEMICAL INDUSTRY, and THE INDUSTRIAL PEST CONTROL ASSOCIATION, 14 Belgrave Square, London, S.W.1, at 10 a.m. Two-day symposium on "Pests of Stored Products." (Fee 10s.)

PLYMOUTH BRANCH, PHARMACEUTICAL SOCIETY, room 16, new building, Plymouth Technical College, at 7.30 p.m. Mr. T. Reid (a member of the Society's Council) on "Pharmaceutical Education."

Tuesday, January 21

BIRMINGHAM PHARMACEUTICAL ASSOCIATION, Imperial hotel, at 8 p.m. Mr. E. Pedley (director, West Midlands forensic research laboratory) on "Science and the Detection of Crime."

HARROW BRANCH, PHARMACEUTICAL SOCIETY, oak hall, Baptist Church, College Road, at 8 p.m. Dr. E. H. Belcher (Institute of Cancer Research) on "Radioactivity in Cancer Therapy."

HERTFORD BRANCH, PHARMACEUTICAL SOCIETY, Hertford secondary school, Mangrove, at 8 p.m. Discussion night.

NORTH STAFFORDSHIRE BRANCH, PHARMACEUTICAL SOCIETY, North Stafford hotel, Stoke-on-Trent, at 7.30 p.m. Motions for Branch Representatives' meeting.

PESTICIDES GROUP, SOCIETY OF CHEMICAL INDUSTRY, and THE INDUSTRIAL PEST CONTROL ASSOCIATION, 14 Belgrave Square, London, S.W.1, at 10 a.m. Final day of symposium on "Pests of Stored Products."

WATFORD AND ST. ALBANS BRANCH, PHARMACEUTICAL SOCIETY, Mid-Herts wing, St. Albans City Hospital, Church Crescent, at 8 p.m. Mr. H. S. Grainger (a member of the Society's Council) on "The Educational Policy of the Pharmaceutical Society."

WEST MIDDLESEX CHEMISTS' ASSOCIATION and BRANCH, Feathers hotel, The Broadway, Ealing, London, W.5, at 8 p.m. Dr. J. Bierer (Marlborough Day Clinic) on "Psychiatry."

Wednesday, January 22

BIRKENHEAD AND WIRRAL PHARMACISTS' ASSOCIATION and BRANCH, Central hotel, at 8 p.m. Talk on "The Work of the Liverpool Port Authority."

ROMFORD BRANCH, PHARMACEUTICAL SOCIETY, Robin Hood hotel, Dagenham, at 6.45 p.m. Annual dinner and dance.

Thursday, January 23

BRIGHTON AND HOVE ASSOCIATION OF PHARMACY and BRANCH, Adelphi hotel, Old Steine, Brighton, at 8 p.m. Dr. F. E. Camps (Home Office pathologist) on "Accident, Suicide or Murder?"

BRISTOL BRANCH, PHARMACEUTICAL SOCIETY, board room, old council house, Corn Street, at 7.15 p.m. Social evening.

LEICESTER AND LEICESTERSHIRE BRANCH, PHARMACEUTICAL SOCIETY, Bell hotel, Leicester, at 8 p.m. Annual dinner and dance. Ticket (price 27s. 6d.) from Mr. E. Hugh Butler, 93 Humberstone Gate, Leicester.

SCIENTIFIC FILM ASSOCIATION, Mezzanine cinema, Shell-Mex House, Strand, London, W.C.2, at 6.30 p.m. Dr. J. N. Macdonald (chief medical officer, Lever Bros., Ltd.) on "Health and Safety in Industry."

SOUTH-EAST LONDON CHEMISTS' ASSOCIATION, Pyne's restaurant, Lewisham Way, London, S.E.14, at 6.30 p.m. Annual dinner and dance. Ticket (price £1 5s.) from Mr. W. A. Howard, 30 Bargery Road, London, S.E.6.

SUNDERLAND BRANCH, PHARMACEUTICAL SOCIETY, Palatine hotel, at 7.30 p.m. Miss M. A. Burr (a member of the Society's Council) on "Current Affairs in Pharmacy."

Friday, January 24

EAST KENT BRANCH, PHARMACEUTICAL SOCIETY, Chez Laurie, Herne Bay, at 8 p.m. Annual dinner and dance.

ROYAL PHOTOGRAPHIC SOCIETY, Princes Gate, London, S.W.7, at 7 p.m. Mr. J. Hadland on "The High-speed Camera in Industry."

SOUTH-WEST LONDON CHEMISTS' ASSOCIATION, Lambeth town hall, Brixton Hill, London, S.W.2, at 8 p.m. Members' colour films and slides; Dr. G. R. Boyes on "The British Pharmaceutical Conference, 1957."

Advance Information

LIVERPOOL SCHOOL OF PHARMACY, OLD STUDENTS' ASSOCIATION, Exchange hotel, Liverpool, on February 12. Dinner and dance on the occasion of the eightieth birthday of Mr. H. Humphreys-Jones (formerly proprietor of the School). Tickets from Mr. J. Griffin, 9 Church Street, Ormskirk, Lancs.

PRINT AND PUBLICITY

COMMERCIAL TELEVISION

PROGRAMME details are given to enable chemists to put in linking-up displays if they wish. Notice given is as far in advance of the programme date as can be guaranteed by the broadcasting companies. Where known, the number of appearances of the product during the week is shown in parentheses.

January 26 to February 1

LONDON

Airwick (4). Alka-Seltzer (2). Anadin. Atkinsons "skin deep" (2). Beecham's pills (3) powders (5). Bristow's shampoo. California syrup of figs. Colgate dental cream.

Eno's fruit salt (2). Eucryl tooth-powder (2). Fynnon salt. Galloway's cough syrup (4). Germolene (3). Gibbs' S.R. tooth-paste (7). Gillette razors and blades (2). Gon. Handy-Andies (2). Horlicks (4). Iron Jelloids (2). Kleenex (5).

Lantigen 'B' oral vaccine. Lemskin (3). Macleans indigestion remedies (2) tooth-paste (2). Macprin (2). Max Factor preparations. Milk of Magnesia preparations (3). Moorland indigestion tablets. Pacquins. Palmolive soap. Penetrol inhalant. Phensic (7). Phosferine (2). Phyllosan (2). Potter's catarrh pastilles. Punch and Judy tooth-paste (2). Sanatogen. Sea-pearls (3). Silvikrin hair cream (2). Spratt's mixed ovals. Supavite (3). Suregrip rubber gloves (3).

Veno's cough mixture (3). Vitafort capsules (2). Vita-Glucose. Vosene (3). Vykmin. Water Lilies shampoo (3). Williams Lectric shave. Yeast-Vite (2). Zeph nasal spray. Zubes pastilles (2).

MIDLAND

Airwick (4). Alka-Seltzer (2). Anadin (3). Atkinsons "skin deep" (2). Beecham's pills (4) powders (5). Brylcreem. California syrup of figs. Cojene. Colgate dental cream.

Eucryl tooth-powder (2). Galloway's cough syrup (4). Germolene (3). Gibbs' S.R. tooth-paste (12). Gillette razors and blades (2). Gon (2). Halo liquid shampoo. Handy-Andies (3). Horlicks (4). Iron Jelloids (2). Kleenex (5).

Lobelline cough syrup (3). Macleans indigestion remedies (2) tooth-paste (2). Macprin (2). Max Factor preparations. Milk of Magnesia preparations (4). Moorland indigestion tablets (2). Pacquins (2). Palmolive soap. Penetrol inhalant. Phensic (7). Phosferine (3). Phyllosan (3). Potter's catarrh pastilles. Punch and Judy tooth-paste.

Safada cream shampoo. Scott's emulsion. Silvikrin hair cream (2). Supavite (2). Veno's cough mixture (3). Vosene (3). Vita-Glucose. Vykmin. Water Lilies shampoo (3). Williams Lectric shave. Yeast-Vite (2). Zeph nasal spray (2). Zoflora. Zubes cough mixture (3) pastilles (2).

NORTHERN

Airwick (4). Alka-Seltzer. Anadin (3). Atkinsons "skin deep." Beecham's pills (6) powders (6). Brylcreem. California syrup of figs. Cephos (4). Colgate dental cream.

Eno's fruit salt (2). Eucryl tooth-powder (2). Fynnon salt. Galloway's cough syrup (4). Germolene (3). Gibbs' S.R. tooth-paste (10). Gillette razors and blades (2). Gon. Halo liquid shampoo. Handy-Andies (3). Hiltone (4). Horlicks (3). Kleenex (5).

Macleans indigestion remedies (2) tooth-paste (3). Macprin (2). Max Factor preparations. Milk of Magnesia preparations (3). Moorland indigestion tablets (2). Pacquins (2). Palmolive soap. Penetrol inhalant. Persomnia tablets. Phensic (7). Phosferine (3). Phyllosan (3). Potter's catarrh pastilles.

Safada cream shampoo. Scott's emulsion. Silvikrin hair cream (2) shampoo. Supavite (3). Thermogene (3). Veno's cough mixture (5). Vita-Glucose. Vykmin. Water Lilies shampoo (5). Dr. White's Kompo (4). Yeast-Vite (2). Zeph nasal spray (2). Zubes cough mixture (2) pastilles (2).

SCOTLAND

Airwick (2). Alka-Seltzer (2). Anadin (2). Askit (10). Atkinsons "skin deep" (2). Beecham's pills (3) powders (4). Bisodol. Brylcreem (4). California syrup of figs. Colgate dental cream.

WASHABLE SHOWPIECE: Suitable for use with all the main products of Trufood, Ltd., 113 Newington Causeway, London, S.E.1, the showcard illustrated has a transparent plastic finish with high-gloss surface that is easily wiped clean.

Eno's fruit salt (2). Fynnon salt. Galloway's cough syrup (4). Germolene (2). Gillette razors and blades (2). Gon. Halo liquid shampoo (2). Handy-Andies (3). Horlicks (3). Kleenex (5).

Macleans indigestion remedies (2) tooth-paste (2). Macprin (2). Max Factor preparations. Milk of Magnesia preparations (3). Moorland indigestion tablets (2). Pacquins (2). Palmolive soap. Penetrol inhalant. Persomnia tablets. Phensic (4).

Sanatogen (2). Supavite (3). Veno's cough mixture (3). Vita-Glucose. Vosene (3). Vykmin. Water Lilies shampoo (2). Zeph nasal spray (2). Zubes pastilles (2).

WALES

Airwick (2). Alka-Seltzer (2). Atkinsons "skin deep" (4). California syrup of figs. Colgate dental cream.

Fynnon salt (2). Halo liquid shampoo. Horlicks (3). Kleenex (5).

Max Factor preparations. Moorland indigestion tablets. Palmolive soap. Penetrol inhalant. Radian B.

Safada cream shampoo. Silvikrin shampoo (7). Spratt's mixed ovals (7). Yeast-Vite (2). Zubes pastilles.

Other products which are currently being advertised (but for which no station has been notified) include: French's Bird Foods. Owbridge's lung tonic. Pifco vibratory massager. Victory V lozenges. 1001 cleaner.

PUBLICATIONS

Medical Propaganda

Manufacturers' leaflets, folders, booklets, etc., directed to doctors but available to pharmacists.

GEIGY PHARMACEUTICAL CO., LTD., Wythenshawe, Manchester, 23: "Teevex for relief of pruritus." Pp. 6.

GLAXO LABORATORIES, LTD., Greenford, Middlesex: "B.C.G. freeze-dried vaccines"; "Cortelan tablets and injection"; "Ef-Cortelan with Neomycin skin preparations"; "Ef-Cortelan skin ointments" (information cards).

MERCK SHARP & DOHME, LTD., Hoddesdon, Herts: "Soluric — a new all-purpose oral diuretic" (12-p. booklet).

PHARMACEUTICAL SPECIALITIES (MAY & BAKER), LTD., Dagenham, Essex: "Largactil" (4-p. folder); "Phensedyl cough linctus" (blotter).

ROUSSEL LABORATORIES, LTD., 847 Harrow Road, London, N.W.10: "Amenorone for Menstrual Disorders"; "Cortibiotic Skin Ointment"; (8-p. booklets). "Sterogyl-15 Massive-dose Vitamin D2" (6-p. folder).

Price Lists

BENGUE & CO., LTD., Mount Pleasant, Alperton, Middlesex: January 1958. Pp. 6.

EVANS MEDICAL SUPPLIES, LTD., Speke, Liverpool, 19: Drugs, fine chemicals, pharmaceuticals, counter adjuncts, medical and veterinary products. January 1958. Pp. 119.

SANDOZ PRODUCTS, LTD., 23 Great Castle Street, London, W.1: Price changes and changes in general terms. January 1958.

C. & D. WEEKLY LIST OF PRICES

A = Advanced; R = Reduced; I.R.P. = Inclusive Retail Price; * = Tax 30 per cent.; † = Tax 90 per cent.

ESSO PETROLEUM CO., LTD.

		Doz.	I.R.P.	
Flit insecticide	8 oz.	19 0	2 3	A
	16 oz.	29 0	3 6	A
sprayer		31 0	3 9	A
powder	2 oz.	10 8	1 4	A
	8 oz.	32 0	4 0	A
livestock spray	160 oz.	145 0	17 6	A

MILTON ANTISEPTIC, LTD. (from January 9)

Milton denture powder*	19 6	2 8	A

P.A.T.A. LIST

(Alterations notified this week by the Proprietary Articles Trade Association.)

ADDITIONS TO THE LIST

EVAN WILLIAMS CO., LTD.

		Gross	
Hi-Glo shampoo*	sachet	62 0	9
		Doz.	
	bottle	15 4	2 3
Brilliantine†		10 0	2 0
	spray pack	25 0	5 0
		Gross	
Colour rinses†		30 0	6

Among items added to the list during 1957 were: Coleman's Vitacup; Gordon Moore's tooth-paste; Odol preparations; Pond's Angel Touch; and Wincarnis jellies.

DELETIONS FROM THE LIST

SAVORY & MOORE, LTD.

Medilax, Cimolitc.

NEW PRODUCTS AND PACKS

ALLEN & HANBURYS, LTD.

			Each	
Proctocaine	vial	10 mils	2 4	3 6

BOOTS PURE DRUG CO., LTD.

Calcipen-V tablets			
240 mgm.	12	10 7	
	100	76 8	
	500	366 8	

CUXSON, GERRARD & CO., LTD.

		Doz.	
Salutone*	8 oz.	27 8	4 6
		Each	
dispensing pack	40 oz.	10 0	
dispensing pack	80 oz.	18 6	

ESSO PETROLEUM CO., LTD.

Flit insect repellent lotion*		Doz.	
	2 oz.	15 0	2 3

EVANS MEDICAL SUPPLIES, LTD.

		Each	
Coscopin linctus*	4 fl. oz.	2 6	4 6
dispensing pack	2 litres	36 0	

JOSEPH FARROW & CO., LTD.

French's budgerigar seed mixture	1	0
	1	11
"budgie treat"	1	9
conditioning food	1	6
budgerigar grit		9
cuttle bone		9
budgerigar bell	1	0
canary mixture	1	11

GLAXO LABORATORIES, LTD.

Freeze-dried B.C.G. vaccine			
multi-dose ampoule	5	3	7 0

MAX FACTOR HOLLYWOOD AND LONDON (SALES), LTD.

Invisible foundation† tube	3	9

ORGANON LABORATORIES, LTD.

Ovestin tablets	25	6 0	
	100	20 0	

G. D. SEARLE & CO., LTD.

Rolicton tablets			
400 mgm.	20	15	9
	100	73	4
	500	340	0

SPRATT'S PATENT, LTD.

		4 Doz.	
Topcat		28 0	9
	20 or more	26 8	

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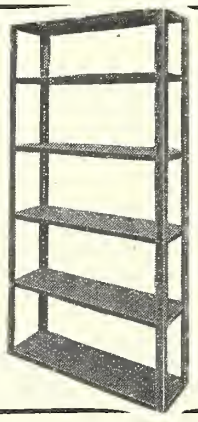

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20 of these drawers are contained in the "INDUSTRIAL TWENTY." Overall size, 42 in. high × 13 in. wide × 12 in. deep. Delivered free **£7.15.0.**

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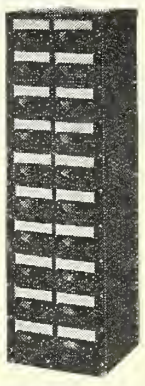

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Once people have discovered Citroze, they tell their friends about it. Because not only does it give up-and-at-'em energy, but Citroze tastes so nice. Pure concentrated glucose, flavoured with whole fresh lemons. Retail price, 2/6 and 3/9.

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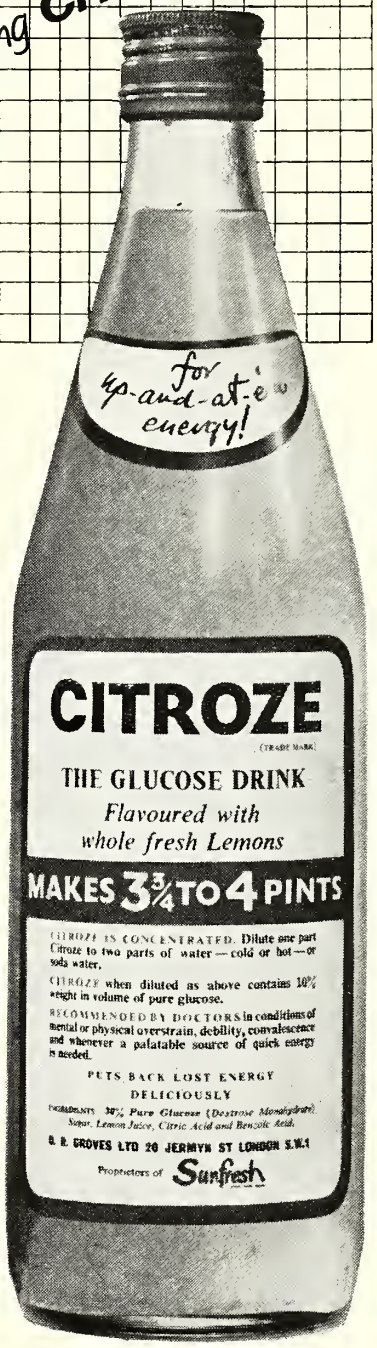

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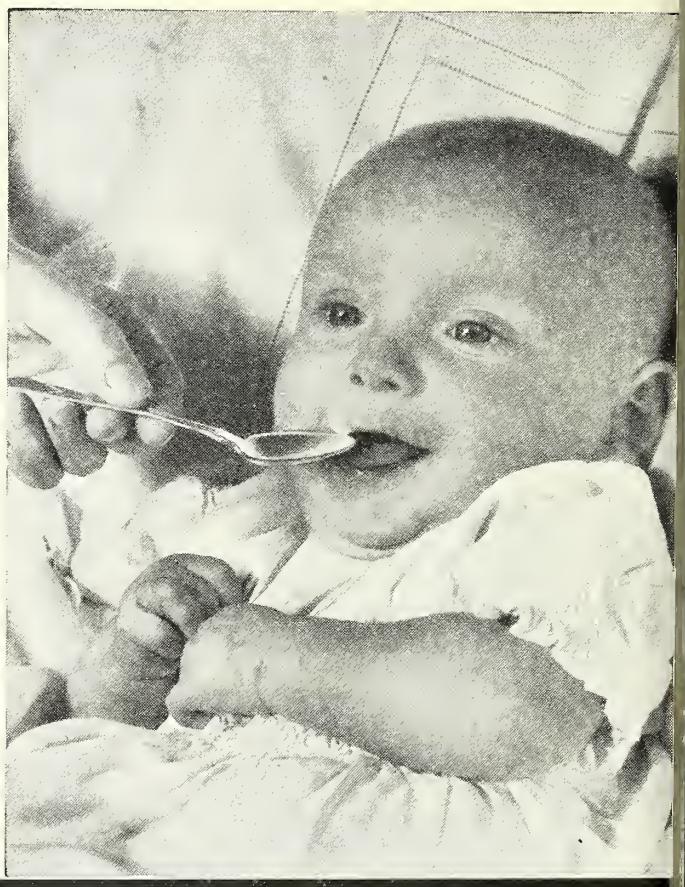

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EPSOM SALTS
B.P.
and Technical Quality

Special Qualities for Bath and Veterinary uses. Special types of crystals matched and any degree of exsiccation to order

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Pea or Feathery Crystals

ALL SPECIALLY PACKED FOR EXPORT

HARRIS HART & CO. LTD.
GREGGE STREET WORKS, HEYWOOD, LANCS
Grams: HARP Heywood, Lancs

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SUGAR CANE MOLASSES

packed in glass jars for convenience and better protection.

Available in various sizes.

SELLING AGENTS

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ST/T.35

Only 'Bubbly' Stergene

washes wool, silk, rayon, nylon and 'Terylene' REALLY WHITE — and colours BRIGHT,

restores 'yellowed' nylon or rayon garments to their original whiteness,

gives a 'balanced' lather — enough for the wash; but completely dispersed with one rinse.

can be confidently recommended

RETAIL PRICES
Family Size 2/-, Handy Flat Size 1/3
Plus 2d. deposit on bottle.

Trade price list and leaflets available on request.

'Bubbly' Stergene

DOMESTOS LIMITED, COLLEGE WORKS, ALBION ROW, NEWCASTLE UPON TYNE, 6.

NOW-
The famous
INECTO
four!

★ **INECTO RAPID**

Keeps cash registers ringing. Has a world reputation for tinting white or grey hair permanently and indetectably. Universally used and recommended. Sold with simple picture directions in 18 natural shades.

2/6 + P.T. Retail 6/-

★ **COLOUR CREME**

Creamy rich and so gentle, it is available in the same 18 shades as Inecto Rapid. Its deep reconditioning qualities actually improve hair health.

3/4 + P.T. Retail 8/-

★ **FOUR-IN-ONE**

So called because it simultaneously lightens, brightens, colours and conditions drab, faded or just-greying hair in shampoo time. A range of 11 glamorous shades.

2/6 + P.T. Retail 6/-

★ **"HAIR MAGIC"**

A new exciting semi-permanent hair colouring, delightfully easy to use. Applied like a shampoo, gives new highlights, softness and lustre. No skin test required. Really breath-taking shades, *including new sensational Browns for hair up to 50% grey.* There is a simple colour chart with every bottle.

1/8 + P.T. Retail 4/6

FROM ALL WHOLESALERS

BACKED BY CONTINUOUS AND COMPELLING ADVERTISING

** Ask for free shade guides, attractive showcards and "hand-out" leaflets.*

Enquiry Bureau
INECTO HOUSE, 27 DOVER STREET, LONDON, W.1
HYDe Park 7541 (12 lines)

The latest research evidence on the value of known preparations for the treatment of gastric disorders is available from us free.
This booklet is indispensable reading for manufacturers in this field.

M.C.P. PURE DRUGS LIMITED
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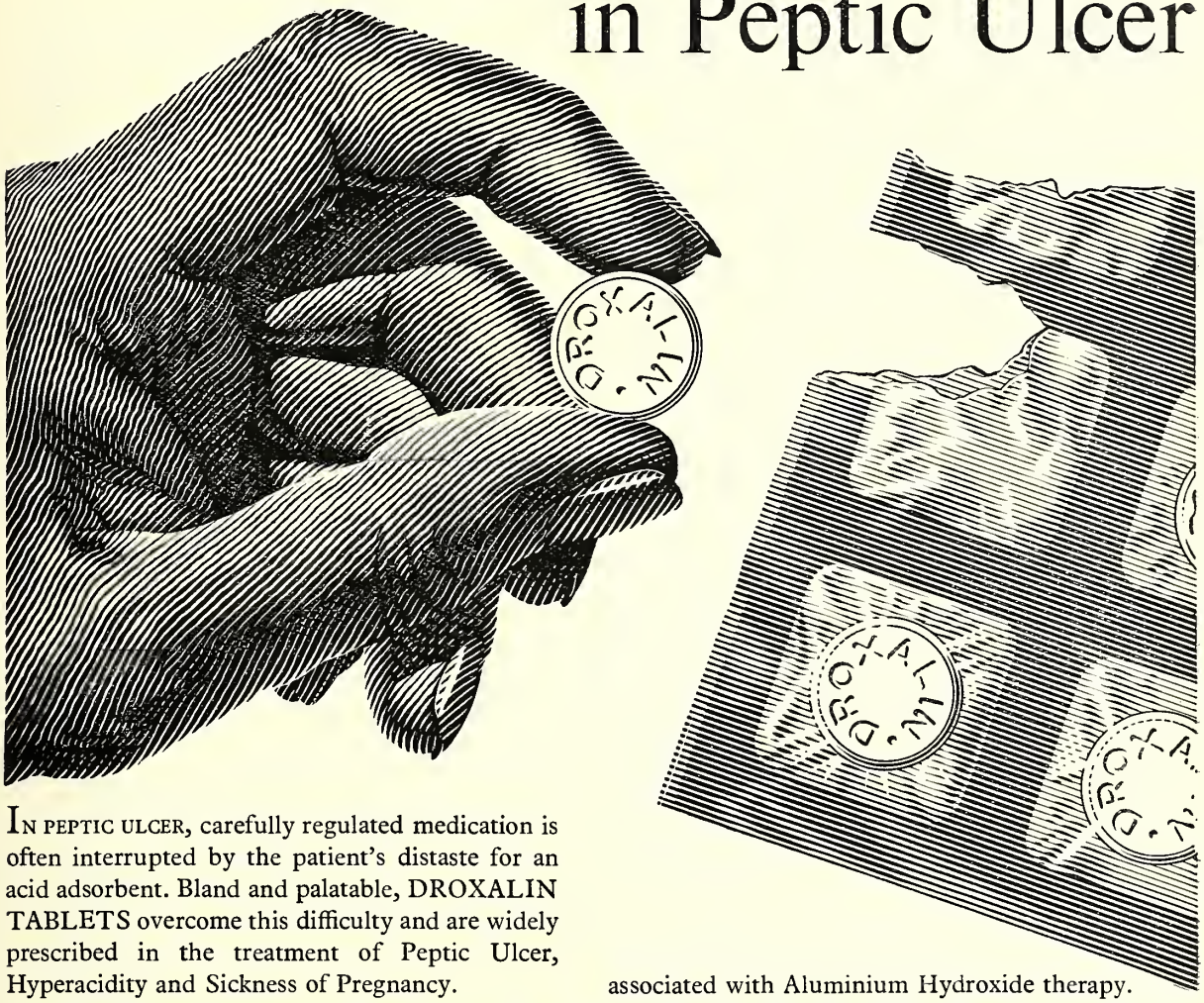
Covent Garden 2701

VOCALZONE PASTILLES

ADVERTISING AND A FREE SAMPLING SCHEME
are steadily increasing the demand
PACKED IN COUNTER DISPLAY CARTONS
Obtainable from your usual supplier or direct from:
VOCALZONE LTD.
120 MOORGATE · LONDON · E.C.2

DROXALIN palatability in Peptic Ulcer



IN PEPTIC ULCER, carefully regulated medication is often interrupted by the patient's distaste for an acid adsorbent. Bland and palatable, DROXALIN TABLETS overcome this difficulty and are widely prescribed in the treatment of Peptic Ulcer, Hyperacidity and Sickness of Pregnancy.

DROXALIN combines the two most preferred acid adsorbents – Aluminium Hydroxide and Magnesium Trisilicate. Pleasantly flavoured, the DROXALIN TABLET commands the patient's ready acceptance, being free from grittiness or the metallic taste usually associated with Aluminium Hydroxide therapy.

DROXALIN gives quick relief from pain by rapid acid adsorption* without danger of secondary acid rise or other harmful side effects. The special film packing enables DROXALIN to be carried hygienically in pocket or handbag.

Active ingredients per tablet:
Gelat. Alumin. Hydrox. Sicc... 2.5 grains Mag. Trisil ... 2.5 grains.

**This will neutralise 50 mls. of N/10 HCl in thirty minutes.*

AT 2/6d. FOR 30 TABLETS DROXALIN SHOWS 34% on S.P.

A Dispensing Pack of 504 tablets is available.

DROXALIN

Doctors receive regular mailings and samplings

SCOTT & TURNER LTD., ANDREWS HOUSE, NEWCASTLE UPON TYNE, 1.

PRESSWORK, TINS, CANISTERS
DECORATED METAL BOXES
CONTAINERS OF ALL KINDS
DRUMS AND KEGS

MODERN PACKAGES
LIMITED

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IPECAC
SENEGA
MENTHOL

and all other Botanicals, Gums,
Waxes, Essential Oils and Spices

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Telephone : LONdon Wall 6585 (4 lines)
Telegrams : "Ergotine, Stock, London"

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Further outlook—
COLD and WET!
just the weather for
Rheumatism,
Fibrositis,
Lumbago,
and

RADIARAY
INFRA-RED
and Radiant Heat Lamps.

Brochure available from
Hinders LIMITED
174/192, Estcourt Road,
London, S.W.6 Estab. 1919

New

DISTAQUAINE V-K

Potassium penicillin V

a chemically improved form of 'DISTAQUAINE' V

* **greater solubility**
* **faster absorption**
* **earlier peak blood levels**
* **higher therapeutic concentration**

DISTAQUAINE V-K

Each tablet contains the equivalent of 125 mg. penicillin V acid (as potassium salt):

Dosage: One or more tablets, depending upon the severity of the infection, at four-hourly intervals.

DC(B)L

THE DISTILLERS COMPANY (*Biochemicals*) LIMITED

Broadway House, The Broadway, Wimbledon, London S.W.19 Tel: Liberty 6600.

Owners of the trade mark 'DISTAQUAINE'

PPH5/58

IRON IN AN EASILY ASSIMILATED FORM

Ferrous Gluconate

B.P.C.

The new remedy in iron therapy without side effects.
Recommended for tabletting or use in elixirs, etc.
Available for delivery from stock.

A quality product of

KEMBALL, BISHOP & CO., LTD.

CROWN CHEMICAL WORKS

THREE MILL LANE · BROMLEY-BY-BOW · LONDON · E.3.

Telephone: ADVANCE 1234 (7 lines) *Telegrams: KEMBALL, BOCHURCH, LONDON.*

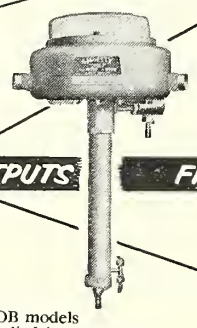
CONTINUOUS PERFORMANCE

MANESTY

AUTOMATIC

WATER STILLS

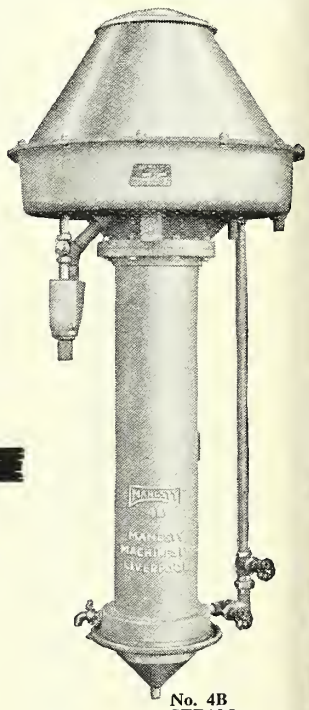
Manesty Automatic Water Stills are available with outputs from 2 pints to 50 gallons per hour and models can be supplied with heating by gas, electricity, paraffin or steam.
Distilled water produced is above the requirements of the British Pharmacopoeia.



OOB ELECTRIC
Output 6 to 8 pints per hour.
The OB and OOB models can now be supplied in a vitreous enamel and chrome finish.

OUTPUTS FROM 2 PINTS TO 50 GALLONS PER HOUR

Simple to install, Manesty Machines ensure a constant supply of fresh pure distilled water. No storage, handling or transport problems arise and to save further floor space a wall bracket is provided for each model.



No. 4B STEAM HEATED
Output 50 gallons per hour.

FULLY ILLUSTRATED LEAFLETS ON REQUEST

MANESTY MACHINES LIMITED

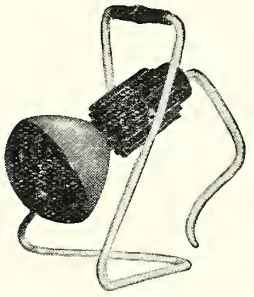
DEPT 5, SPEKE, LIVERPOOL 19. Telephone: HUNts Cross 1972. Telegrams: Manesty, Liverpool 19.

TABLET MACHINES • COATING PANS • MIXERS • DRYING OVENS • PUNCHES and DIES • GRANULATORS

Sunshine and Warmth...

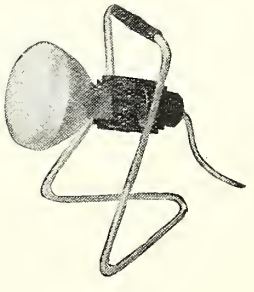
for people of all ages

So many people would feel all the better for the stimulating warmth and sunshine provided by Philips Health Lamps. For instance, when used on medical advice, these lamps are often remarkably successful in treating rheumatic complaints and debilitated conditions.



Philips Infra-red INFRAPHIL

Philips Infraphil was installed in the medical centres at the last two Olympic Games. It is most valuable in alleviating the pain of arthritis, rheumatism and muscle-strain. Infraphil Infra-red lamp (made in Holland) costs only **£3.3s.0d.** De-luxe model "A" Price: **£4.4s.0d.**



Philips Ultra-violet SUNLAMP

Philips Sunlamp gives the blessing of "Mountain sunshine". Doctors know the value of the right type of sunlight and do not hesitate to recommend the Philips Sunlamp. Ultra-violet Sunlamp (made in Holland) Price: **£5.17s.6d.**

Philips Health Lamps will be advertised extensively in the press and on television, so make sure you have stocks to meet the demand.
A doctor's certificate must be presented when either of these lamps is purchased by the public.

PHILIPS

PHILIPS ELECTRICAL LIMITED

ELECTRICAL APPLIANCES DIVISION

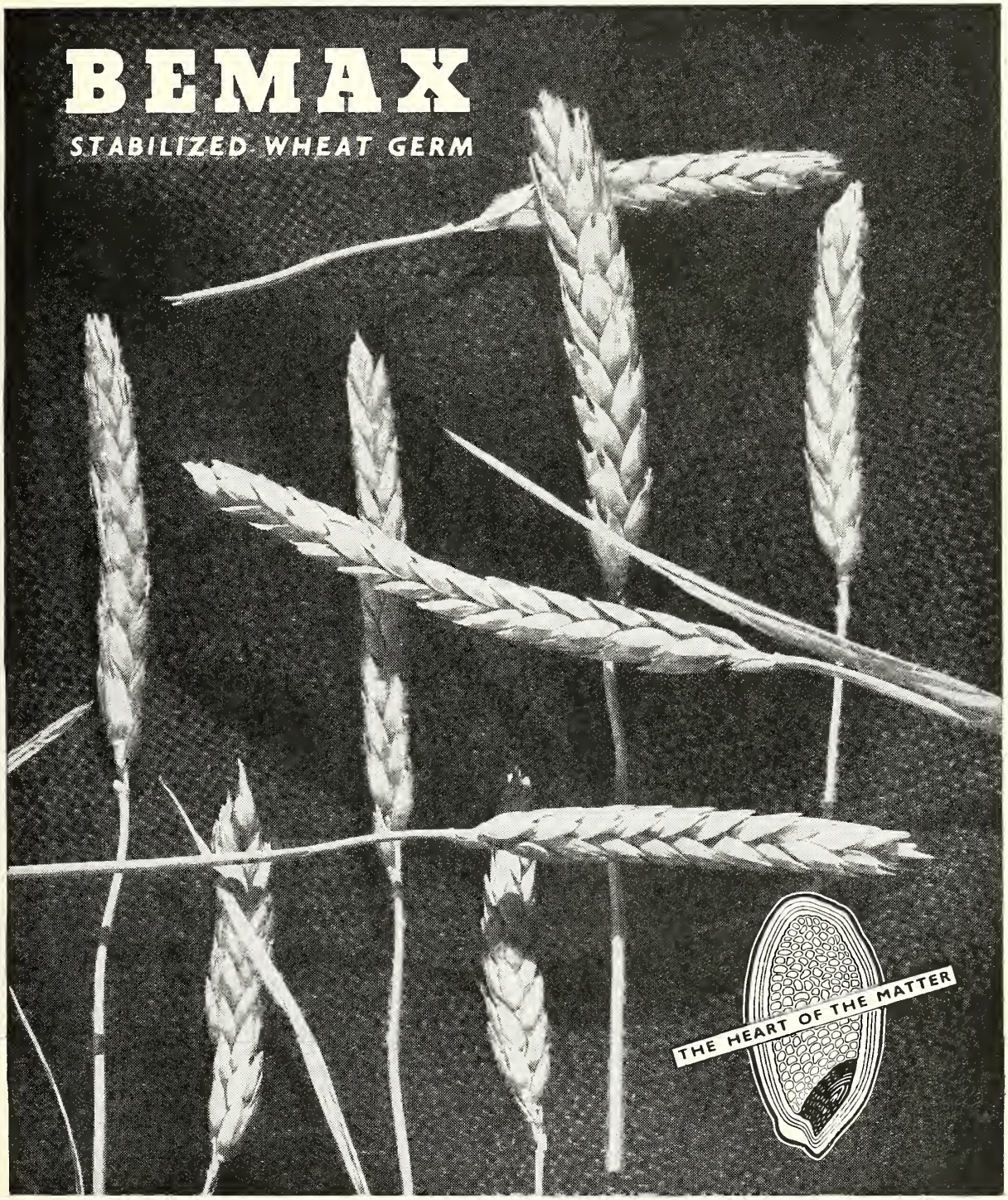
Century House, Shaftesbury Avenue, London, W.C.2

(INF2076B)

- ***HEAVIEST ADVERTISING SUPPORT*** for a premium soap. All the year round coverage through Press and T.V.
- ***GIVES HIGHER PROFIT MARGIN*** than any other soap in its class.
- ***A FAMILY SOAP*** for the new middle classes — the market for better quality goods that symbolizes a higher standard of living.

with
Cussons IMPERIAL LEATHER
Toilet and Bath Soap

CUSSONS SONS & CO LTD
KERSAL VALE · MANCHESTER 7



Of all natural vitamin-protein-mineral supplements the richest is wheat germ; and Bemax is stabilized wheat germ pure and simple. It offers easily digested nutritional support for patients of all ages.

Dozen	*Quantity terms*
1/9 carton at 16/6	16/- dozen
3/- „ „ 28/6	27/3 „
5/6 „ „ 52/6	50/- „

Quantity terms available on minimum orders of 3 doz × 3/- or the equivalent in the 1/9 and 5/6 sizes (1 × 3/- = 2 × 1/9 = ½ × 5/6).

- **PREGNAVITE** *during pregnancy*

Vitamin-mineral supplementation is obtained by routine administration of *Pregnavite*. It is designed with maternal dietary requirements specifically in mind.

- **VITAVEL SYRUP** *for the child*

Vitamin supplementation with A, B_1, C and D so palatable as to ensure regular dosage is provided by *Vitavel Syrup*.

VITAMINS LIMITED (DEPT. AA.8), UPPER MALL, LONDON, W.6

The outstanding throat lozenge

OUTSTANDING BONUS TERMS AVAILABLE UNTIL JANUARY 31st

Take this opportunity to lay in full stocks at the most generous terms ever given.

Supplied in special plastic vials of 12 lozenges, list price 2/6, in counter boxes of 12 vials. Exempt Purchase Tax.
'Tyrozets' may be sold by Pharmaceutical Chemists without a prescription.

MSD

'TYROZETS'
TRADE MARK

MERCK SHARP & DOHME LIMITED, HODDESDON, HERTS

In all walks of life . . .

WOMEN

rely on Mene

The particular quality and value of Mene is well known by women everywhere. Our sales figures prove that women have found that they can rely on these towels for super-soft comfort, economy and complete security. Only the very finest materials are used in order to ensure maximum absorbency and protection.

Mene
REGD.

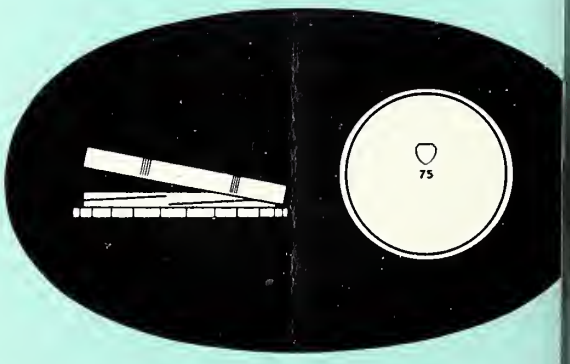
ROBINSON & SONS LTD
Chesterfield and London

Ortho

the ethical name in contraception

The unmatched quality and efficiency of the ORTHO contraceptive line pays tribute to t standing and resources of the Ortho Research Foundation — universally acknowledged scientifi authority in the study of the control of fertility

These high grade products are the most widely prescribed of their kind and are ethically and constantly promoted through nation-wide medical detailing ar prominent medical press displays.



DELFEN Vaginal Cream

The most spermicidal contraceptive from modern research, for use with or without an occlusive device.
Package A: 70 gm. tube, with Ortho Applicator
Package B: 70 gm. tube

PRECEPTIN Vaginal Gel

Contraceptive gel for use without a diaphragm.
Package A: 85 gm. tube, with Ortho Applicator
Package B: 85 gm. tube

ORTHO-GYNOL Vaginal Jelly

Contraceptive jelly.
Package A: 85 gm. tube, with Ortho Applicator
Package B: 85 gm. tube

ORTHO-CREME Vaginal Cream

Contraceptive cream.
Package A: 75 gm. tube, with Ortho Applicator
Package B: 75 gm. tube

ORTHO-GYNOL Set

Containing: 85 gm. tube of Ortho-Gynol
Ortho Diaphragm } in sizes 55 to 95
Ortho Diaphragm Introducer } (in 5 mm. gradations)

ORTHO-CREME Set

As Ortho-Gynol Set with tube of Ortho-Creme instead of Ortho-Gynol in sizes 55 to 95 (in 5 mm. gradations)

ORTHO KIT

Containing: Full size Ortho-Gynol, trial size Ortho-Creme, Ortho Diaphragm and Diaphragm Introducer in woven plastic zipper bag. Sizes 55 to 95 (in 5 mm. gradations)

ORTHO Duo-Pack

Containing: Ortho Diaphragm in sizes 55 to 95 (in 5 mm. gradations)
Trial size Ortho-Gynol Trial size Ortho-Creme

ORTHO Vaginal Diaphragm

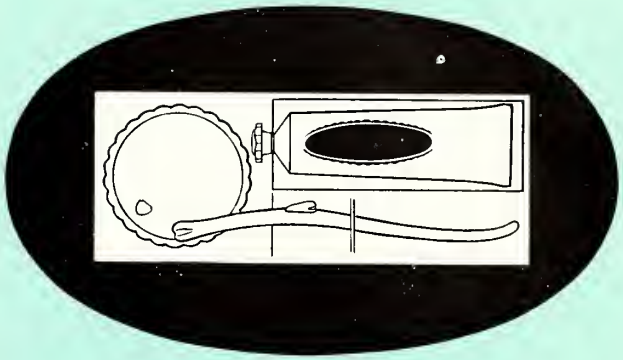
Coil spring, sizes 55 to 95 (in 5 mm. gradations)

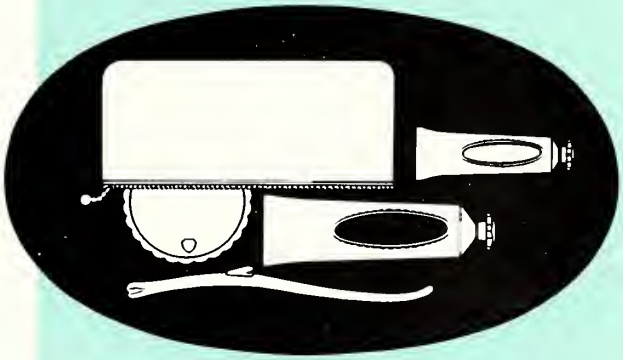
ORTHO Applicator

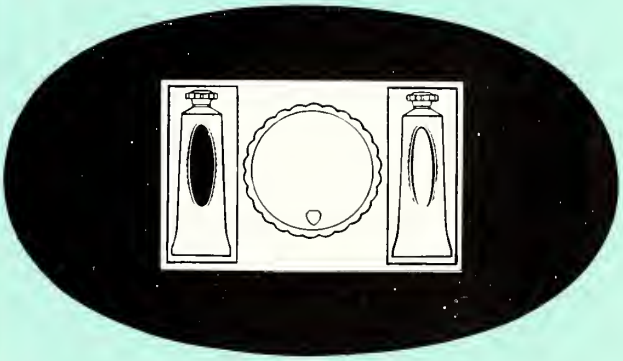
For vaginal application of measured dose (5 cc.) Ortho-Gynol, Ortho-Creme, Delfen Vaginal Cream or Preceptin Vaginal Gel.

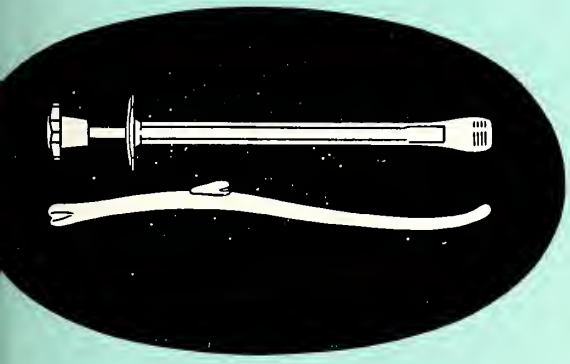
ORTHO Diaphragm Introducer

Individual introducers to accommodate diaphragms sizes 55 to 95 (in 5 mm. gradations)









Ortho

Ortho Pharmaceutical Limited · High Wycombe · England

Good profits—

You don't have to stock Lastonet because there are no stock sizes. Each stocking is made (in nylon or cotton elastic net) to the patient's measurements. Hence the great Lastonet reputation for perfect fit. Two more good reasons for ordering Lastonet — quick delivery and excellent profit margin. Lastonet can be supplied against ordinary NHS prescription, and every stocking is guaranteed for 6 months. Write for stocking measurement forms and display material.

no risk

LASTONET PRODUCTS LIMITED
CARN BREA, REDRUTH, CORNWALL

Lastonet

ELASTIC NET STOCKINGS

℗T4

REMEMBER . . . .

WHEN REQUIRING

ASPIRIN and/or SALICYLATES

CONSULT . . . . .

GRAESSER SALICYLATES LIMITED

WHO SPECIALISE IN THIS RANGE OF MANUFACTURE AND ARE THUS IDEALLY SITUATED TO GIVE YOU EVERY ASSISTANCE

The Symbol of GRAESSER GS SALICYLATES *Quality and Service*

SANDYCROFT NR. CHESTER

Telephone: HAWARDEN 2125
Telegrams: QUALITY, CHESTER

service..

The postman going his round is a familiar sight. We rely daily upon his service and pay perhaps the highest compliment in taking it for granted. Those who rely upon Sumner's for the supply of drugs, galenicals, dressings, instruments and proprietaries know the value of a speedy, reliable and accurate service.

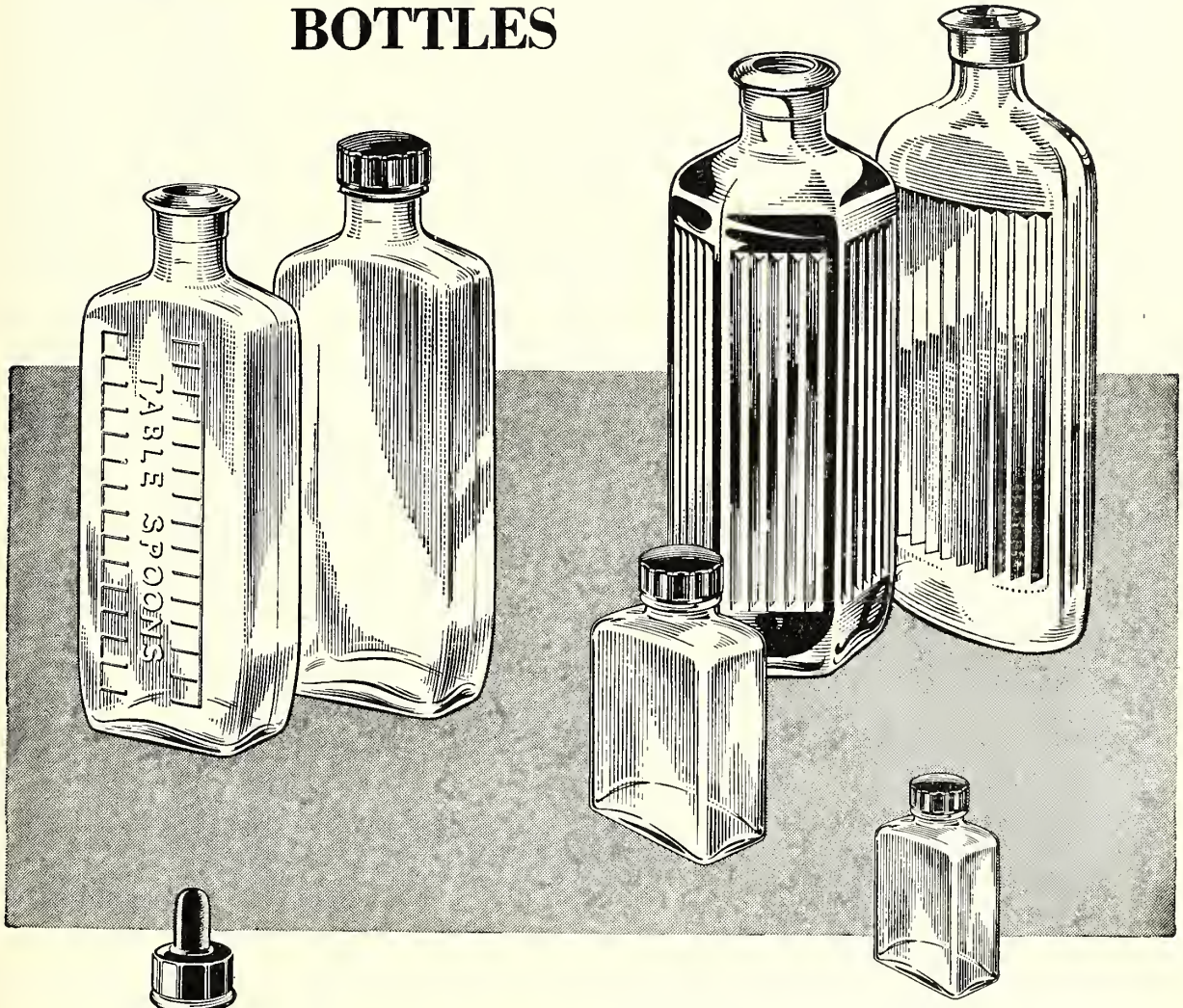
Sumner's

THE NAME FOR SERVICE

R. SUMNER & COMPANY LIMITED
HANOVER STREET · LIVERPOOL
FITZALAN ROAD . CARDIFF

S174

BEATSON DISPENSING BOTTLES



The discerning pharmacist demands a container which combines attractive appearance with sound functional design. Beatson Bottles are produced especially to satisfy both these requirements—they look well, store well, handle well, pour well — Beatson Medicals, Panels, Ribbed Ovals, Emulsions, Tablets, Olive Oils, Poisons, Winchesters and in fact every bottle used in Pharmacy is the better for being "BEATSON."

"The Sign of a TRADE MARK REGISTERED *Good Bottle"*

Be sure to specify BEATSON

BEATSON, CLARK & CO., LTD.

GLASS BOTTLE MANUFACTURERS

ROTHERHAM *Established 1751* **YORKS**

BC 83 B

Women everywhere are seeing advertising for

SCHERK

The Scherk advertising campaign is telling beauty-conscious women of all ages that Scherk Cleansing Lotion and Milk are first essentials for true beauty. These preparations really cleanse and revitalise the skin, keeping it young and lovely. Scherk is being presented in frequent advertisements in selected national women's magazines and on escalator panels on London Underground Stations. NOW is the time to order . . . . NOW they are being advertised.

SCHERK CLEANSING LOTION

No. 7109 23 gram flask 18/- per doz. Retail 3/7 inc. P.T.
No. 7100 50 gram flask 28/6 per doz. Retail 5/9 inc. P.T.

SCHERK CLEANSING MILK

No. 7200 50 gram flask 28/6 per doz. Retail 5/9 inc. P.T.
No. 7201 100 gram flask 44/6 per doz. Retail 8/11 inc. P.T.
(Also available in 250 gram flasks).

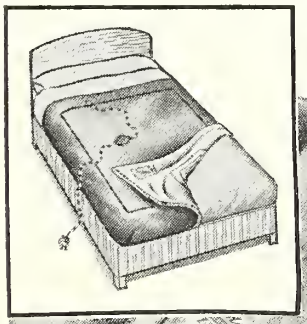
Attractive Showcards *on request.*

Order SCHERK PREPARATIONS from your wholesaler or direct from:
BIOMETICA LTD., BOREHAMWOOD, HERTS.

Telephone: ELSTREE 3145/3520
(3d. call in London area)

ISOBLANKET LANA B.S.

THE GUARANTEED *Trouble-Free* ELECTRIC BLANKET



1. The first Electric blanket to be awarded the B.S. mark.
2. Tucks in all round the bed.
3. A pure wool top blanket.
4. For single or double beds.
5. Three heat switch, with raised figures.
6. Guaranteed for one year.

Size 60″ × 80″ overall.
Retails at £11.18.6. (inc. P.T.)

ISOBLANKET THEA

Same robust construction. Made from raised cotton material.
Size 28″ × 56″ with
Three - heat switch. **£6.13.10.** (inc. P.T.)

ISOBLANKET UNA

Soundly made single heat blanket.
Size 28″ × 48″ **£4.17.4.** (inc. P.T.)

B S
2612

Isopad Ltd

Barnet By-Pass, Boreham Wood, Herts. Phone: ELStree 2817/9

Serial No ★ 2184
BRITISH
GOOD HOUSEKEEPING INSTITUTE
GUARANTEES
REFUND OF MONEY OR REPLACEMENT IF NOT IN CONFORMITY WITH THE INSTITUTE'S STANDARDS

Over 12,000,000 readers

will see this half page advertisement in the DAILY EXPRESS

ON JAN. 28th

Why take all night?

Dentiline

cleans dentures in one minute!

QUICKER · EASIER · BETTER

Clean your denture the modern way with Dentiline—the new formula specially compounded to clean and *sterilize* the modern denture. No soaking, no waiting and no cotton wool! Pour a little Dentiline on the special cleaning pad, wipe the denture all over, rinse it well and there's your denture: sweet 'n' clean and looks it.

Dentiline is quicker, there's no soaking or waiting.

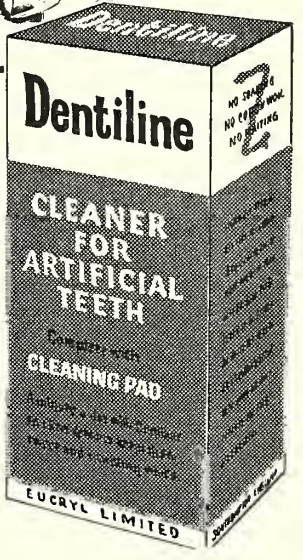
Dentiline is easier, the concentrated liquid cleaner penetrates, cleans and sterilizes every crevice of the denture.

Dentiline is better, it removes stain and discolouration but it cannot harm the finest bridgework. The special cleaning pad cleans softly—safely!

MAKE THIS TEST ON YOUR DENTURES

Get a 2/6 pack of Dentiline and before you go to bed, give your denture a one minute cleaning and sterilization with Dentiline. At once your denture feels nicer—looks nicer, too. Keep it that way—every day with Dentiline.

A minute a day with Dentiline
Keeps your dentures sweet n'clean

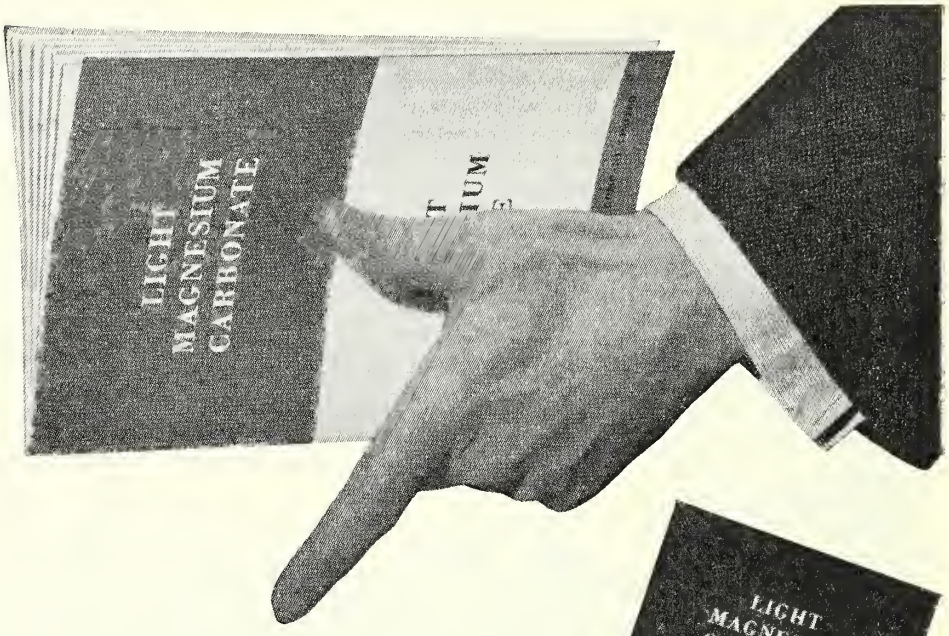


JAN. 28th is the opening date of a national advertising campaign for **DENTILINE** the brilliantly successful Denture Cleaner with its own cleaning pad.

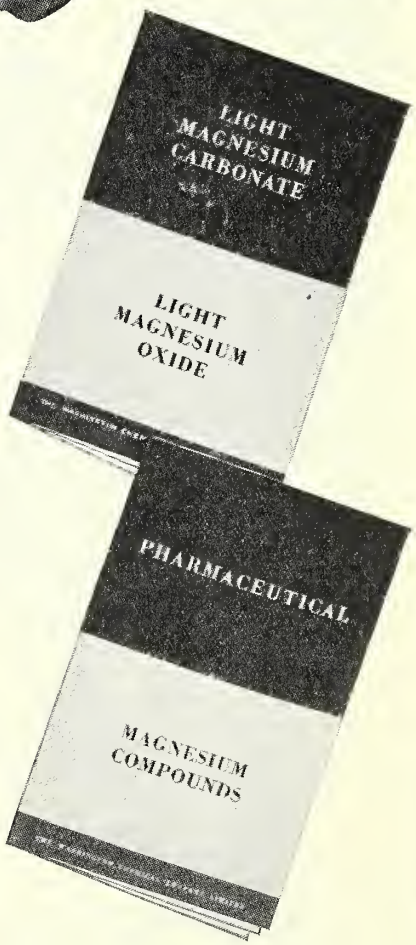
STOCK UP NOW and display Dentiline—a good product on good terms.

Write today to:

EUCRYL LIMITED, SOUTHAMPTON



FACTS TO HAND



Chemists, Chemical Engineers and Pharmacists interested in magnesium chemicals are cordially invited to write or telephone for copies of two booklets which we have recently published.

These give interesting information about our magnesium oxides, carbonates, hydroxides and trisilicates, and also tell something about our research organisation which is always ready to help in development work associated with our products.

THE WASHINGTON CHEMICAL CO. LTD.

A member of the TURNER & NEWALL ORGANISATION

WASHINGTON, CO. DURHAM, ENGLAND

Telephone: Washington 3333. Telegrams: Chemical, Washington Station, England.

LONDON OFFICE. Empire House, St. Martin's le Grand, London, E.C.1. Telephone: MONarch 6898. Telegrams: Pattprodux, Phone London.
MANCHESTER OFFICE. 74 Palmerston Street, Manchester 12. Telephone: ARDwick 2876. Telegrams: Pattprodux, Manchester.

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The CHEMIST AND DRUGGIST

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ORRIDGE & COMPANY 184 STRAND, W.C.2
Tel: TEMple Bar 9212/3 & 6340
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BRANCHES: BIRMINGHAM · SOUTHAMPTON · LIVERPOOL · SHEFFIELD · CARDIFF
Irish Representative: Mr. J. A. Bassett, Ph.C., 57 Great Victoria Street, Belfast, Northern Ireland *Tel: Belfast 27078*

PREMISES TO LET

FINSBURY SQUARE (OFF). New commercial and Industrial Building. Area about 20,000 sq. ft. on ground, basement and four upper floors. Two main entrances. Loading dock. Passenger/goods lift. Central heating. Floor loading 200 lb. per sq. ft. Rent £9,000 p.a. excl. Lease 21 years. Immediate possession. Sole agents: Chamberlain & Willows, 23 Moorgate, E.C.2. (Met. 8001.) C 7486

RICHMOND (Surrey)
TWICKENHAM
Shops with upper part in new developments.
TO LET
Excellent opening offered to Chemist.
Apply:—
Boyd, Ridgley & Partners, 10 Hanover Street, W.1.
(Tel.: MAY 6057) C 1191

BUSINESSES FOR DISPOSAL

BIRMINGHAM. Drug Store, busy main road, populous district. Well-fitted shop. Living accommodation. Takings £90 week. Death cause of sale. £1,750 including property, goodwill and fixtures. Stock at valuation. Walter Ralphs & Janes, F.R.I.C.S., F.A.I., 57 Colmore Row, Birmingham, 3. Central 6366-7. C 1199

MORECAMBE (suburb).—Pharmacy for sale in pleasant village district, unopposed. Modern detached premises, living accommodation. Net profit about £1,000. Expanding district. Energetic pharmacist could easily increase turnover. Vendor retiring. Must sell quickly for health reasons. If property purchased, no charge for goodwill or fixtures, but stock at valuation. Otherwise, if lease granted, price based on stock and fixtures only. Radcliffe, Chemist, Torrisholme, Morecambe. C 1196

WARBOYS, Huntingdonshire (4 miles Ramsey, 7 miles Huntingdon). To wind up estate (business still being carried on). Old-established drug store with off-licence. Turnover £6,000. Good living accommodation and pleasant garden. S.a.v. if required. For sale by auction, Monday, January 20, 1958. Apply Sole Agents: James C. How & Co., Ramsey, Hunts (Tel.: 2244). C 1177

BUSINESSES WANTED

PROMINENT COMPANY wishes to purchase either outright or controlling interest in established manufacturing chemists or proprietary medicine business, size immaterial. Please address all communications, which will be treated in strictest confidence, to Managing Director, Box C 364.

APPOINTMENTS

ARCHWAY GROUP HOSPITAL MANAGEMENT COMMITTEE
Pharmacist

required at Whittington Hospital, N.19. Salary £610—£815. Candidates may visit the department by direct arrangement with the Medical Superintendent (ARChway 3070, Ext.: 440). Applications, stating age, qualifications, experience, and naming two referees, to Group Secretary, 46 Cholmeley Park, N.6, within 10 days. C 7492

BARNET GENERAL HOSPITAL (Category V) WELLHOUSE LANE, BARNET, HERTS
Senior Pharmacist

Applications are invited for the above post in this modern and well equipped pharmacy. (Category V Hospital.) Barnet is the terminus of the Northern Line (London Transport). Whitley salary plus London Weighting. Applications stating age, qualifications and experience together with the names of two referees to Hospital Secretary. C 355

CENTRAL GROUP HOSPITAL MANAGEMENT COMMITTEE
Senior Pharmacist and Pharmacist

required at Bethnal Green Hospital (350 Acute beds). The department has recently been modernised and is approved for training students. N.H.S. Scale within the range £680-£870 for Senior Pharmacist and £600-£815 for Pharmacist, plus appropriate higher qualification allowance. Apply with details of age, training and experience to the Group Secretary, 213 Kingsland Road, London, E.2. C 344

LAMBETH HOSPITAL, BROOK DRIVE, LONDON, S.E.11
Locum Pharmacist

required immediately at the above hospital. Salary by agreement. Telephone Chief Pharmacist. Reliance 3804. C 363

GENERAL HOSPITAL, RAMSGATE
Chief Pharmacist (Category II)

Whitley Council salary scale—£725 to £990 per annum. Applications, stating age, qualifications and experience, with names of two referees, to the Hospital Secretary. C 368

HOSPITALS FOR DISEASES OF THE CHEST
Locum Chief Pharmacist (Category III)

required at The London Chest Hospital from June 16 to June 28, inclusive. Salary by arrangement.
Applications to the Acting House Governor, London Chest Hospital, E.2. C 7508

LAMBETH HOSPITAL, BROOK DRIVE, LONDON, S.E.11 (Acute General Hospital—510 beds)
Senior Pharmacist

Applications are invited for the post of Senior Pharmacist in an expanding department. Salary (plus London Weighting) in accordance with Whitley Council scale.
Applications stating age, experience, qualifications and names of two referees to Secretary. C 361

HIGHBURY HOSPITAL, BULWELL, NOTTINGHAM
Pharmacist

Applications are invited for pharmacist, full-time. The post offers opportunity to obtain experience in general pharmaceutical work. Salary and conditions of service in accordance with the Pharmaceutical Whitley Council regulations.
Applications, stating age, qualifications and names of two referees, to be sent to the Hospital Secretary as soon as possible. C 7483

LAMBETH HOSPITAL, BROOK DRIVE, LONDON, S.E.11
Assistant-in-Dispensing

required. Whitley Council rates of pay and conditions. Applications in writing giving names of two referees to the Secretary. C 360

HOSPITALS FOR DISEASES OF THE CHEST
Pharmacist or Senior Pharmacist

Applications are invited for the above post at the LONDON CHEST HOSPITAL. Salary in accordance with the Whitley Council scales.
Applications, stating age, qualifications and experience, accompanied by two testimonials, to the Acting House Governor, London Chest Hospital, E.2. C 7496

LAMBETH HOSPITAL, BROOK DRIVE, LONDON, S.E.11 (Acute General, 510 Beds)
Pharmacist

required. Salary in accordance with Whitley Council scale, plus London Weighting. Applications stating age, experience, qualifications and names of two referees to the Secretary. C 359

NOTTINGHAM EYE HOSPITAL, THE ROPEWALK, NOTTINGHAM
Assistant-in-Dispensing

required for busy out-patient department, part-time, hours by arrangement. Whitley Council conditions. Applications stating age, experience, qualifications and names of two referees to the Group Secretary, Nottingham No. 1 Hospital Management Committee, General Hospital, Nottingham. C 358

PONTYPRIDD AND RHONDDA HOSPITAL MANAGEMENT COMMITTEE
Senior Pharmacist

required for the Group to be based at the LLWYNPIA HOSPITAL, LLWYNPIA, RHONDDA.
Whitley Council conditions of service with salary scale of £650 per annum x £30 (6)—£830 per annum. Canvassing will disqualify.
Application forms are obtainable from the Group Secretary, Courthouse Street, Pontypridd. C 7499

ST. MARK'S HOSPITAL, CITY ROAD, LONDON, E.C.1, Post-graduate Teaching Hospital
Pharmacist

Applications invited for the appointment of Pharmacist at this surgical hospital (rectal and colonic). New Whitley Council salary scale £580-£785, plus London Weighting. Additional £25 if holding higher qualification. Service in retail pharmacy, etc., be taken into account in deciding commencing salary. Age, qualifications, experience, names two referees to Secretary. C 7506

BAYER PRODUCTS LIMITED

require a young pharmacist for an executive position with excellent prospects in their head office at Kingston-on-Thames.

The post offers unique openings for a candidate who wishes to make a career in the pharmaceutical industry and will embrace sales, product development and technical correspondence.

Every opportunity will be given to the successful candidate. Applications in confidence to the Personnel Officer, Neville House, Eden Street, Kingston-on Thames.

C 7455

LLOYD-HAMOL LTD.

require MEDICAL REPRESENTATION in the following areas:—

MIDLANDS YORKSHIRE

Applicants should have had previous medical representative experience. Commencing salary will be commensurate with experience and a car will be provided.

Applications, giving age, full details of career to date and stating the territory in which interested, should be sent in confidence to:—Ref.F.J.H./MR., LLOYD-HAMOL, LTD., 11 WATERLOO PLACE, LONDON, S.W.1.

C 7468

Appointments—Continued

ROYAL BERKSHIRE HOSPITAL, READING
(Category V)
Senior Pharmacist and Pharmacist

required in Group Pharmaceutical Department, facilities for obtaining wide experience in pleasant surroundings. Staff of eleven. No Sunday duties, frequent 5-day weeks. Apply giving the names of two referees to Group Pharmacist.
C 369

ROYAL EAST SUSSEX HOSPITAL, HASTINGS
Locum Chief Pharmacist

required from February 17 to March 1, 1958. Whitley Council scales applicable. Apply in writing to the Administrator. C 7489

SUNDERLAND AREA HOSPITAL MANAGEMENT COMMITTEE
Pharmacist

required for the General and other hospitals. Salary £580 x £30 (6)—£760 x £25 (1)—£785. Whitley Council Conditions.
Apply immediately naming two referees to the Group Secretary, Sunderland Area Hospital Management Committee, General Hospital, Sunderland. C 7501

WITWATERSRAND TECHNICAL COLLEGE, JOHANNESBURG, SOUTH AFRICA, SCHOOL OF PHARMACY
Vacancy—Senior Lecturer Grade II

Salary scale: £910 x £40—£1,110 x £50—£1,210.
Applications are invited for the post of Senior Lecturer.
Applicants must possess a degree in Pharmacy and a pharmaceutical qualification registerable with the South African Pharmacy Board.
Applicants must have had teaching experience and be able to undertake general teaching to the level of the ordinary degree in Pharmacy.
Experience and qualifications will determine the commencing notch of the salary scale.
The successful candidate will be expected to assume duty as soon as possible.
A cost of living allowance of £234 per annum is payable to married men, plus a temporary vacation bonus of 5 per cent. of basic salary on Public Service conditions.
Application forms obtainable from:
FRANK ROSS & CO. (LONDON), LTD.
Marlow House,
Lloyd's Avenue,
London, E.C.3. C 7475

HEALTH CENTRE

SWINDON HEALTH CENTRE
Deputy Chief Pharmacist

Applications invited from pharmacists for superannuable appointment of Deputy Chief Pharmacist at above Health Centre.
Salary on scale £675—£910 p.a.—39-hour week.
Applications stating age, qualifications, experience and names and addresses of three referees to be sent as soon as possible to the Clerk of the Council, County Hall, Trowbridge.
C 367

SITUATIONS VACANT

RETAIL HOME

LONDON, S.E.27. Experienced lady assistant for general duties and counter work. Pleasant family business. Other staff employed. Apply Leonard Jacob, 126 Norwood High Street, S.E.27. (Gipsy Hill 4384.) C 1204

CAMBRIDGESHIRE. A Pharmacist is required to manage our branch at March. This is a permanent superannuated post with a commencing wage, on present sales, of £20 per week. We have a large modern shop with a staff of six and there are excellent prospects in congenial surroundings. Modern attractive house available at a reasonable rent. Apply to Peterborough Co-operative Chemists, Ltd., Park Road, Peterborough. C 1178

CHEMIST OPTICIAN, must be C.P.C., required to take full charge of well-established optical department in main street pharmacy in Woolwich. Receptionist employed. Please give all details of age, previous experience, etc., in confidence, to Managing Director, Arnold M. Gee, Ltd., 12 High Street, Colliers Wood, S.W.19. C 1207

COMPETENT and experienced sales lady well versed in all branches to supervise. Adequate staff kept. Large, well conducted pharmacy in Wood Green. No dispensing duties. Good salary and bonus to suitable applicant. References will be required. J. S. Jenkin, Ltd., 352 High Road, N.22. BOW 1729. C 1206

HOLIDAY & CO., LTD., Claypath, Durham City, have vacancy for pharmacist (male) as manager. Company long established and shop is in main thoroughfare. Applications by letter, giving details of experience and suggested salary, to this address. C 1195

KINGSBURY. Pharmaceutical Chemist required to manage a substantial business. There is a good supporting staff and the salary will be commensurate with the responsibilities. A flat will be available if desired. Applications giving full details to Box C 1208.

OLDHAM CO-OPERATIVE CHEMISTS, LTD., invite applications for position of pharmacist branch manager. Modern semi-detached house available. Superannuation. Salary and rota fees £930. Applications, stating age, experience, etc., to Oldham Co-operative Chemists, Ltd., King Street, Oldham. C 1193

POTTERS BAR. Experienced Managing Pharmacist required for a business which offers scope for extension and development. There is a substantial salary structure, along with other benefits. Applications in first instance to Box C 1209.

LOCUMS WANTED

MARCH, CAMBS. Locum Pharmacist required for several weeks commencing February 3. Modern shop with full supporting staff. Congenial conditions with reasonable hours of employment. State salary, references, and other details to Superintendent Chemist, Peterborough Co-operative Chemists, Ltd., Park Road, Peterborough. C 1201

RETAIL (OVERSEAS)

PHARMACISTS wanted urgently to manage retail pharmacies in Salisbury, Southern Rhodesia. Salary £100 per month; one month's annual leave, passage to Salisbury paid on three-year contract, proportionate amount deductable if contract is broken. Good working conditions, pleasant climatic conditions. Reply by airmail letter to Advertiser, Box 437, Salisbury, Southern Rhodesia. C 1203

WHOLESALE

ANALYST wanted for analytical and research work by old-established manufacturing company in Liverpool area. Pharmaceutical qualification minimum and experience desired. Five-day week. Pension scheme. Full details with application to Technical Director. Box C 7510.

DEVELOPMENT CHEMIST

required by small Fine Chemical Manufacturing Company, associated with substantial American concern. The successful applicant should have a sound knowledge of organic and inorganic chemistry and fine chemical manufacture. He should be able to advise the Board on the development of the manufacturing side of the Company and be able to put approved recommendations into effect. The position calls for a keen, ambitious, qualified chemist having sound ideas and capable of seeing them through. Full details in strict confidence to Box C 7464.

GENATOSAN LIMITED.
12 DERBY ROAD, LOUGHBOROUGH
require
DISPENSERS

There are vacancies for laboratory assistants in the Pharmaceutical Development Department of Genatosan Limited to work on the formulation and packaging of new pharmaceutical and toilet products. Dispensing experience is essential and the Apothecaries' Hall Diploma would be an advantage. Progressive salary scale; excellent conditions of employment; pension and welfare facilities. Applications to the Personnel Officer. C 7507

EXPORT EXECUTIVE

AMERICAN ASSOCIATE COMPANY, Drug and Fine Chemical Manufacturers, require an experienced export executive. He should be familiar with the procurement and selling of drugs and chemicals. A keen business sense, an enthusiasm to seek out foreign markets, combined with a detailed knowledge of export and shipping procedure, is essential. After a trial period the successful applicant will be appointed Export Manager of the Company. Full details of training, experience and positions held in strict confidence to: Box C 7463.

GENATOSAN LIMITED
(a member of the Fison Group)
require a
CHEMISTS' REPRESENTATIVE

to sell to wholesale and retail chemists on a territory consisting substantially of Birmingham and adjacent areas of North Warwickshire, and Staffordshire. This appointment results from the approaching retirement of the present representative on this territory.
Applicants must have pharmaceutical qualification or background, or good selling experience in a similar field. Successful applicant would have to reside on the territory, preferably in the suburbs of Birmingham.
This post is well remunerated and superannuated. Applications in confidence should be made now and must contain full details of age, education and experience, and be addressed to the Personnel Officer, Genatosan Limited, Loughborough, Leics. Please quote Ref. 31. C 7476

"In the most advanced illnesses the most advanced cures are also the most effective." *

—HIPPOCRATES

If you are interested in a progressive career as a

MEDICAL REPRESENTATIVE

for a growing organisation producing notable drugs, you are invited to apply for any of the following new territories shortly to be created to aid our programme of expansion:

EAST ESSEX KENT WILTSHIRE AND BERKSHIRE LINCOLNSHIRE
NOTTINGHAMSHIRE NORTH STAFFORDSHIRE BIRMINGHAM YORKSHIRE (WEST RIDING)
CHESHIRE CENTRAL LANCASHIRE MIDDLESBROUGH AREA

Applicants should have had a good education, a background in pharmacy and/or medicine and be in the age group 23-35. Previous experience not essential as training will be given.

The Company operates a pension and life assurance scheme, and a car is provided. Good commencing salary will be paid commensurate with age and experience. Apply:

MSD SALES MANAGER, MERCK SHARP & DOHME LIMITED, HODDESDON, HERTS.

* Steroids — Sulphonamides — Antibiotics — 'Benemid' — 'Inversine' — and *now* 'Saluric' (Chlorothiazide) . . . some of the accepted drugs and preparations originated in the Merck Sharp & Dohme Research Laboratories.

C 7480

Situations Vacant—Continued

EVAN WILLIAMS require a representative for the London area to call on chemists, ladies' hairdressers and stores. Salary, commission, and expenses paid. A new car is supplied every year. Write in confidence stating particulars (tabulated), of age, experience, and remuneration earned to Sales Manager, Evan Williams Co., Ltd., Aintree Road, Perivale, Greenford, Middlesex. C 1210

GENATOSAN LIMITED
(a member of the Fison Group)
require
MEDICAL REPRESENTATIVES

for the following territories:—
(a) N.E. London and part of Essex,
(b) N.W. London and part of Middlesex.

the latter is the result of a promotion. Applications are invited from persons with a pharmaceutical qualification or similar technical background. Experience of representation would be an advantage.

These posts are well remunerated and superannuated, and offer good prospects for keen and energetic men possessing the ability and desire to make a success of this specialised work.

The successful applicants will have to reside on, or adjacent to, the territory.

Applications, in confidence, should contain full details of age, education and experience, to the Personnel Officer, Genatosan, Ltd., 12 Derby Road, Loughborough, Leics. Please quote reference 34. C 7459

JOHNSON & JOHNSON (GT. BRITAIN), LTD., have vacancy for a REPRESENTATIVE in South-west Wales. The successful applicant should preferably have experience in calling on retail and wholesale chemists and must reside in or near Swansea. Remuneration is by salary and commission and a contributory pension scheme is in operation. Expenses are paid and a company car provided. Write, giving age, education and career to date to Pharmaceutical Sales Manager, 260 Bath Road, Slough, Bucks. C 7490

LONDON territory. Opportunity exists for keen young man to represent exclusive cosmetic house. Full details in first letter to Box C 1198.

MANUFACTURING MANAGER

An expanding company, situated less than 20 miles north of London, requires a pharmacist to take charge of manufacturing departments and share the responsibility for qualified checking. The successful applicant will be directly responsible to the production manager. The situation—which is pensionable—offers excellent prospects for future advancement. Applications should be from Members or Fellows of the Pharmaceutical Society, aged between 25 and 35, who have had experience in the manufacture of a variety of Pharmaceuticals including tablets, sterile products, and ointments, addressed to: The Director of Production, Box No. 1378, c/o Charles Barker & Sons, Ltd., Gateway House, London, E.C.4. C 7443

MAY & BAKER, Dagenham, Essex, are looking for a senior copywriter to take charge of their copywriting department and supervise the work of a team of copywriters covering ethical medical products and other pharmaceutical and chemical manufactures. Applicants should have several years' experience of medical copywriting. This is a senior appointment and salary will be commensurate with the responsibilities. Contributory pension scheme. Apply initially in writing to the Personnel Officer, quoting reference No. 113. C 7502

MEDICAL REPRESENTATIVE

required by large firm of manufacturing chemists, to interview doctors, hospitals and chemists in:

ESSEX, NORFOLK AND SUFFOLK

Applicants should have medical or pharmaceutical background, but previous experience as a representative is not essential. Residence in West Essex is an advantage. Car and expenses provided. Pension scheme in operation. Apply, giving age, full details of qualifications and experience, and state salary required. Only applications which give full information requested will be considered. Box C 7497.

DUE TO
CONTINUED EXPANSION
PFIZER LTD.
wish to enlarge their
MEDICAL REPRESENTATIVE Force

and invite applications for vacancies in selected areas in the United Kingdom.

The Company is a British subsidiary of a leading American ethical pharmaceutical house. Preference will be given to applicants with pharmaceutical qualifications or background. Good starting salary and expenses. Car provided. Non-contributory Pension Scheme.

Applications, giving full particulars of age, experience, etc., should be made in writing to the **Personnel Officer, 137/139, Sandgate Road, Folkestone, Kent. Quoting reference E 66.12.**

C 7368

REPRESENTATIVE required by manufacturers and distributors of hypodermic syringes and needles, laboratory glassware, surgical instruments, etc., several areas; preference given to applicant with medical background or connections with hospitals. Remuneration by salary and commission, car provided. Full details, age, education, qualifications, etc., Box C 1156.

SALES MANAGER, for home and export, required by proprietary medicine manufacturers. Must be experienced in this trade and have some practical knowledge of modern advertising methods. Willing to travel. Write, giving brief details of career and present salary to Box C 7505.

SALES SUPERVISOR required for Scotland and the four Northern counties, preference given to one having connections with retail chemists in the area. Clinical detailing an added advantage. Remuneration by salary and expenses and car allowance. Staff superannuation scheme. Write giving full details of past career to Box C 7456.

TABLET COATER required by manufacturing chemists, West Middlesex. Must be capable of producing good white and colour work. Modern plant with all facilities, five-day week, canteen, pension scheme. Apply with full details of experience and salary required to Box C 7462.

Situations Vacant—Continued

REPRESENTATIVE required to call on chemists in Mid and North Wales, selling nationally known sanitary towels, surgical dressings and chemists' sundries. Salary, commission, and expenses. Box C 7484.

TABLET MAKER. Applications invited from experienced tablet makers by a firm of manufacturing chemists in West London. Write stating age, experience and salary required to Box C 1176.

THE DISTILLERS COMPANY (BIOCHEMICALS), LIMITED

Applications are invited from men up to 45 years of age with the appropriate experience for the position of medical and pharmaceutical representative. A pharmaceutical qualification is desirable.

Appointments are to be made in the following areas:—

(a) South Wales
(b) Birmingham
(c) Glasgow

Forms of application may be obtained from the Home Sales Manager, The Distillers Company (Biochemicals), Limited, Broadway House, The Broadway, Wimbledon, London, S.W.19. Correspondence should be marked "Confidential." C 7474

URGENTLY required by established manufacturing chemists situated East London. Warehouseman with first-class knowledge of checking, packing, galenicals, drugs, etc. Successful applicant should be capable of acting as first assistant to foreman and interested in increased efficiency by example. Apply in writing to Box C 7500.

VETERINARY REPRESENTATIVE

Required by Manufacturing and Wholesale Chemists to call on the qualified veterinary profession in Southern England and the West Country. This is a very well established territory with good prospects of further development. Car and expenses provided with good salary and bonus. Previous experience of representation is very desirable. Apply to Box C 7453.

WHOLESALE (OVERSEAS)

A LEADING Pharmaceutical House invites applications from Pharmacists for a vacancy in the sales force of their Branch Organisation in Salisbury, Rhodesia. This will appeal to young men aged 25-32, preferably single, anxious to go abroad. Comprehensive training will be given in the United Kingdom. The position offers scope for advancement within a growing organisation and the salary will be fully commensurate with qualifications, experience and the responsibilities involved. Apply initially in writing to Box C 7460.

AGENTS WANTED

AGENTS required in all parts of the country to appoint stockists for the sale of seeds and fertilisers and to take over existing agencies for leading Midland horticultural house on commission basis. State area covered. Box C 1194.

AGENTS (all areas) with established connection among retail chemists, able to take additional line, required to sell extremely popular new article, Nationally advertised. Good commisston basis. Write Box C 7488.

AGENT for Home Counties required by manufacturers of well-known beauty preparations. Commission only. Must have established connections with retail chemists and stores. Write in confidence giving age, and full particulars of lines now carried. Box 1202.

ESTABLISHED AGENT calling on wholesale and retail chemists and stores required by well known sponge importers, for Yorkshire, Northumberland and Durham. Commission only. References required. Reply Box C 7498.

SITUATIONS WANTED

RETAIL HOME

QUALIFIED Chemist, L.P.S.I., would like to hear of vacancy in good-class retail business. Box C 1192.

WHOLESALE

ENERGETIC and experienced representative seeks position as representative with drug, ethical or sundries house. Well known to chemists of 26 counties. Will travel any territory. Car driver. Excellent references from leading houses. Solid reasons for leaving present employ. Box C 1185.

AGENCIES WANTED

RECENTLY retired after representing Reckitt & Sons for 43½ years I am now free to accept one or two commissions. For the past 20 years chemist representative for Cambs, Suffolk, Norfolk, part Essex, part Herts, Bedfordshire, Bucks, Berks, Oxon. First-class connection throughout this area. Own car. Please write to F. H. Johnson, 50 Victoria Road, Colchester, Essex. C 1205

BUSINESS OPPORTUNITIES

CAPSULES OF
HALIBUT LIVER OIL B.P.
SPECIAL PRICES FOR BULK OR PACKED
VITAMIN CONTENT GUARANTEED

THEAKROCK PHARMACEUTICALS Ltd
14 YORK BUILDINGS • HASTINGS • SUSSEX
C7465

PACKAGING FACILITIES AVAILABLE

London Manufacturing Chemists offer facilities for packing up to 250 gross units per week of tablets, liquids or powders.

Apply Box 191 **Erwoods Ltd.**
211 Piccadilly, W.1.
C 7491

WANTED

LARGEST CASH BUYERS of photographic equipment of every description, outdated film and paper, etc. Spears, 14 Watling St., Shudehill, Manchester, 4. Phone Blackfriars 1916. Bankers: Midland Bank, Ltd. C 341

WANTED: Ton lots of trisodium phosphate, chlorinated trisodium phosphate, and tripoly sulphates. Apply Box C 7504.

WANTED: Hand-operated tablet machine for experimental work. Box No. 791, Smiths, 296 High Holborn, London, W.C.1. C 7495

WE WILL PURCHASE for cash a complete stock, a redundant line, including finished or partly finished goods, packing raw materials, etc. No quantity too large. Our representative will call anywhere. Write or telephone:—Lawrence Edwards & Co., Ltd., 6/7 Wellington Close, Ledbury Road, London, W.11. Tel. Bayswater 4020 and 7692. C 140

MISCELLANEOUS SALES

100 BAYS of brand new adjustable steel shelving, 72 in. high by 34 in. wide by 12 in. deep, stove-enamelled bronze green. Sent knocked down—6 shelf bay—£3 15s. Sample delivered free. Quantity discounts. N. C. Brown, Ltd., Eagle Steelworks, Heywood, Lancs. Telephone: 69018. C 7473

CHAMOIS LEATHERS
Attractively Cellophane Wrapped !
Approx. size 20 in. x 14 in.
ONLY 4s. 11d. per Skin
Min. order 1 dozen—1 Kip (30) less 5%
Send Today for your supply of this
First-class Selling Line
(Special Terms for Wholesalers)
COUNTY CHAMOIS CO., LTD.,
ROCKY LANE,
ASTON CROSS, BIRMINGHAM
Makers of the "County" Mop
C 7450

SURPLUS STOCKS OF PHARMACEUTICAL CHEMICALS

Offers are invited for any or all of the following surplus chemicals at present stored in Sweden. Offers (c.i.f. U.K. port) indicating the item number and quantity of interest should be made to Mrs. Skarle, A. B. Astra, Sodertalje, Sweden, *or* Astrapharm, Ltd., 24 Fairfield Road, Kingston, Surrey. Kingston 4481.

Item No.	*Product*	*Quantity lb.*
108	Dimethylaniline	1,200
110	Manganese glycerophosphate	200
122	Zinc dust	7,200
123	Semicarbazid hydrochloride	200
124	Succinic anhydride	1,300
125	Isopropylbarbituric acid	400
126	Phenylpropyl alcohol	150
128	Alpha-amidopyridin	150
137	Phenylacetamide	3,200
141	Hexaethyltetraphosphate	500
143	Proteinhydrolysate M-Z-amine type B	5,100
144	Lactalbuminhydrolysate A	4,000
146	Alkyl dimethylamine	200
147	Allylchloride	1,400
148	Tergitol 7	2,000
154	Gamma-Picoline	100
160	Undecylene acid	200
161	Khellin	30
162	Agar	200
165	Mercury chloride (corr. subl.)	2,900
166	Potassium permanganate	5,500
167	Sodium bromide	10,900
175	Urea pure	15,400
177	Progesterone	0·2
179	Isoamylalcohol	5,500
182	Span 20	1,700
187	Meta-aminobenzoic acid	200
189	B-Cyclohexylpropionic acid	80
190	Cellufix FF 500	1,300
195	G-Strophanthine	20

IMPORTANT SALES NEWS:—JODEZ (Manchester), Ltd., 8/10 Shudehill, Manchester, 4, are clearing thousands of redundant lines at real "Bargain" prices. Write for Sales parcels of Ear-rings, Bracelets, Pearls, Necklets, Brooches, etc., now (from £10 upwards). Also just arriving: The new season's fashionable Beads, Bracelets, Ear-rings, etc., from abroad. C 7472

1. One Turner Horizontal Rotary Dresser 7 ft. 9 in. x 3 ft.; belt driven; fast and loose pulleys.
2. One Pascall Turbine Sifter comprising stainless steel screens, motorised 3-phase ½ h.p.
3. One Samuelson Double-ended Centrifugal Dressing Machine.
4. Two 10-cwt. belt-driven worm spiral Powder Mixers. Vertically operated, discharged through cone base.
5. One over-driven Granite Edge Runner Mill 8 ft. diam. pan; rollers 5 ft. diam. x 14 in. face; belt drive; fast and loose pulleys.
6. One under-driven Edge Runner, Pan 4 ft. 6 in.; rollers 2 ft. 8 in. x 6 in. face; belt driven.

Apply:
The Birmingham Chemical Co., Ltd., Wiltell Works, Lichfield, Staffs
C 7511

PREMISES SOLD, must clear. Stainless steel Vacfil bottle filler, electric, £35. Ekem filler on bench, £25. Youngs' powder filler, £15. 1 cwt. assorted lipstick, etc., dyes, £5. 7 lbs. Cologne essence, £3 10s. 100,000 strip perfume labels, £5. Dawsons, Brimscombe, Stroud. C 1197

TENDERS

LANCASHIRE COUNTY COUNCIL

Tenders are invited for the supply of cod liver oil and malt, etc., for resale at child welfare centres. Forms of tender from the County Medical Officer of Health, Room 109, East Cliff County Offices, Preston, and returnable by Saturday, 8th February, 1958. C 7494

The Director General, India Store Department (MIS. 2), Government Building, Bromyard Avenue, London, W.3, invites tenders for the supply of Plaster of Paris Bandages, 18,000 tins, and Slabs, to B.P.C. quality or equivalent. Forms of Tender, which are returnable on Monday 10th February, may be obtained from this Office (CDN) Branch, upon payment of a fee of 10s. 0d., which is not returnable. Reference No. 545/57/3 (CDN) must be quoted in all applications. C 7503

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